DOCUMENT RESUME

ED 227 341 CE 035 433

TITLE The Future of Vocational Education and Training.
INSTITUTION Organisation for Economic Cooperation and Development, Paris (France).
REPORT NO ISBN-92-64-12425-X
PUB DATE 83
NOTE 70p.
AVAILABLE FROM OECD Publications and Information Center, 1750 Pennsylvania Avenue, NW, Suite 1207, Washington, DC 20006-4582 ($6.50).
PUB TYPE Information Analyses (070)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Comparative Analysis; *Economic Development; Educational Finance; Educational Needs; Educational Objectives; Educational Planning; *Educational Policy; *Educational Trends; *Financial Support; *Futures (of Society); Job Training; Postsecondary Education; Program Development; *School Role; Secondary Education; Trend Analysis; *Vocational Education

ABSTRACT

One of the committees of the Organisation for Economic Cooperation and Development (OECD) examined the vocational education and training policies of its member countries. The committee identified a number of significant policy directions that are emerging in OECD countries. Among these are an enhanced political commitment to providing vocational training, a strengthening of the economic and social roles of vocational education, and a raising of the quality of vocational education, training and skills of the labor force. Analysis of the vocational education and training policies of individual OECD-member countries reveals particular emphasis on the contributions vocational education can bring to innovation, to technology, to the supply of labor, and to productivity and economic development. In addition, many OECD-member countries are in the process of reforming their mechanisms for financing initial and further skills training. If these reforms are to succeed, the following key issues must be addressed: the share of costs among firms, and between the state and firms; the costs of combined work and training; and the development of financing arrangements that are flexible enough to respond to changes in work content and in the labor force. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED227341

THE FUTURE OF VOCATIONAL EDUCATION AND TRAINING

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

OECD

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE035433

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to article 1 of the Convention signed in Paris on 14th December, 1960, and which came into force on 30th September, 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The Signatories of the Convention on the OECD are Austria, Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries acceded subsequently to this Convention (the dates are those on which the instruments of accession were deposited): Japan (28th April, 1964), Finland (28th January, 1969), Australia (7th June, 1971) and New Zealand (29th May, 1973).

The Socialist Federal Republic of Yugoslavia takes part in certain work of the OECD (agreement of 28th October, 1961).

Publié en français sous le titre:

LE DEVENIR DE L'ENSEIGNEMENT
ET DE LA FORMATION PROFESSIONNELS

© OECD, 1983
Application for permission to reproduce or translate all or part of this publication should be made to:
Director of Information, OECD
2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

There is extensive debate in OECD countries about vocational education and training, and most of them are considering or are introducing significant changes. The reasons for this include growing awareness that, whilst the status of vocational education and training is often low, there is little or no justification for segregating general and vocational education; the changing economic and social situation which calls for people able to adapt to and generate structural economic change; and the recognition of different needs among the labour force according to age, sex or ethnic origin.

To help countries exchange views about the ways in which vocational education and traning are evolving and might be guided by governments a Joint Working Party was set up by the Education Committee and the Manpower and Social Affairs Committee of the Organisation. The following report was prepared by the Joint Working Party during 1981 and 1982 after consultation with BIAC and TUAC. The report was adopted by the Education Committee at its 27th Session in May 1982, and by the Manpower and Social Affairs Committee at its 57th Session in June 1982.

The decision to derestrict the report was taken by the Council of the Organisation at its 574th Meeting on 1st December 1982.

Also available

EDUCATION AND WORKING LIFE (December 1977)
(91 77 09 1) ISBN 92-64-11732-6 64 pages £1.80 US$3.75 F15.00

POLICIES FOR APPRENTICESHIP (February 1979)
(91 78 04 1) ISBN 92-64-11864-0 104 pages £3.00 US$6.25 F25.00

FUTURE EDUCATIONAL POLICIES IN THE CHANGING SOCIAL AND ECONOMIC CONTEXT (August 1979)
(91 79 06 1) ISBN 92-64-11966-3 174 pages £5.00 US$12.00 F48.00

Prices charged at the OECD Publications Office.

THE OECD CATALOGUE OF PUBLICATIONS and supplements will be sent free of charge on request addressed either to OECD Publications Office, 2, rue André-Pascal, 75775 PARIS CEDEX 16, or to the OECD Sales Agent in your country.

TABLE OF CONTENTS

		Page
	INTRODUCTION	7
I.	SUMMARY OF EMERGING POLICY DIRECTIONS	10
II.	MAIN CONCERNS, AIMS AND CONSIDERATIONS IN CHANGING POLICIES	15
	Economic and social concerns	15
	Education and the labour market	18
	Political considerations and policy institutions	21
	New policy directions in selected OECD countries	24
III.	STRENGTHENING THE ECONOMIC ROLE OF VOCATIONAL EDUCATION AND TRAINING IN THE NEXT DECADES	39
	Innovation	39
	New Technologies	42
	Manpower supply and scarcities	45
	Productivity and development	48
IV.	NEW INITIATIVES TO RELATE VOCATIONAL EDUCATION AND TRAINING TO SPECIFIC GROUPS IN THE LABOUR FORCE	54
	New entrants to the labour force	54
	Children of foreign workers	58
	Girls and women	59
	Adults faced with unemployment	62
V.	THE REFORM OF MECHANISMS FOR FINANCING INITIAL AND FURTHER SKILL TRAINING	64
	The share of costs among firms, and between the State and firms	65
	The costs of combined work and training	67
	Are financing arrangements flexible enough?	67

INTRODUCTION

1. In 1980 the OECD issued a report which reviewed the main policy aims of Member countries in this field and drew attention to the need to adapt systems and policies to the economic and social changes that began to appear in the 1970s(1).

2. Since then the number of OECD countries which have made a major political commitment to providing extensive opportunities for vocational education and training has increased. The need to help promote economic recovery and new long-term development, to reduce unemployment and to help specific groups in the labour force obtain access to employment has brought vocational education and training to the forefront of political discussion and significant increases in public funds have been committed to it.

3. Accordingly many countries are considering changes in their systems and policies to ensure that these commitments are met. In some of them, this is primarily a question of the further improvement of well-developed systems. In others, there is a need to create systems or introduce significant reforms as often happens when there is a change of governments. In addition the current and forecast circumstances of most OECD countries have given an extra impetus to policy development. The general problem facing OECD countries in the field of vocational education and training is strikingly similar in many of them, even though their systems differ greatly. This situation presents a challenge to policy-makers and those who deliver vocational education and training to make the most effective use of the additional resources they are receiving at a time when other sectors of public expenditure are being reduced in many countries.

4. To help Member countries compare the different approaches they are using, and to consider together the underlying policy questions that arise, the Organisation set up an ad hoc Joint Working Party of the Education Committee and the Manpower and Social Affairs Committee. The mandate of the Joint Working Party was "to undertake, on the basis of the results of recent work by the Organisation, a review of the current state of policies for vocational education and

---

1. "Report on Vocational Education and Training", OECD, derestricted document, Paris, 1980.

training; to identify the main policy options under changed conditions of economic activity and the labour market, having regard to the future economic, technological and social development of OECD countries". More specifically, the Joint Working Party was asked "to consider the adaptation of policies to deal with major issues in Member countries, including the following.

i) The role and status of vocational education and training in relation to policies for general education and for economic, social, industrial, regional and local development in the context of changing economic and labour market conditions. This will include consideration of the institutional arrangements for the formulation of policies for vocational education and training; the quality of vocational education and training; measures to bring vocational education in schools, initial training and further training into a more coherent sequence of opportunities for individuals; and the effective utilisation of financial and human resources.

ii) The implications for vocational education and training at all stages of the widening application of new technologies;

iii) Policies to place current short-duration work experience programmes for new entrants to the labour force within a longer-term strategy for the employment of less competitive groups;

iv) The distribution of responsibilities for training between the public authorities and employers, including the effectiveness of financial formulae and mechanisms."

5. The Joint Working Party discussed these questions at two meetings in 1981 by first reviewing the present situation on the basis of two Secretariat reports as the point of departure for a discussion of the directions in which policies can or should evolve in the future. The Joint Working Party has attempted to make progress in the discussion of policies by undertaking a broad review of recent developments and policy innovations that are being envisaged or put in place in Member countries. It also took into account the views of a number of experts at a meeting in July 1981.

6. The Joint Working Party has also taken into account the views expressed by the Business and Industry Advisory Committee (BIAC) and the Trade Union Advisory Committee (TUAC) in special consultations, and has been very appreciative of their willingness to participate in a discussion of policies which would have had little meaning if they had not been closely involved. Their views are reflected throughout this report even though they are not always mentioned in explicit detail. Indeed the BIAC and the TUAC reflect interests that often compete in the labour market in the short run but that coincide on many issues when placed in a long-term perspective.

7. This report embodies the conclusions of the Joint Working Party about these questions, illustrating them by the discussions and innovations taking place in Member countries. It has attempted to deal with general issues of relevance to vocational education and training for all sectors of the economy including government administration even though many of the examples refer only to the manufacturing sector. It should be remembered that in many Member countries the tertiary sector has been increasing its share of employment. The general issues of current concern in vocational education and training may be reflected in different ways in sectors outside manufacturing, and this must be borne in mind when considering the implications of the findings of this report.

8. Whilst many problems are common, the policies being adopted by different Member countries illustrate a wealth of different approaches as each country seeks not only to learn from others but to find solutions it considers acceptable and appropriate.

9. The report begins with a summary of the directions in which policies are emerging (Part I). Then comes a discussion of the main aims and considerations that are being taken into account in Member countries and an outline of the main changes taking place or being considered in individual countries (Part II). This is followed by a discussion of the ways in which countries seek to improve the contribution of vocational education and training to economic performance and development. A significant restructuring of OECD economies is needed in the years ahead. Moreover the rate and the character of economic development is inseparable from the use of technology, especially new technologies (Part III). A series of problems of great social and political importance which arise from changes taking place in the labour market, especially in the changing composition of the labour force, are then discussed to identify the measures to help specific groups and overall policies towards them (Part IV). Finally, a number of countries are considering how to reform their arrangements for the financing of initial skill training, which is discussed in Part V.

10. The time horizon is one that stretches from the present well into the next century. Anyone completing vocational education and training in 1982 at the age of 20 is likely to be in the labour force until about 2020. Some of the policy and institutional changes that will be made during the next few years to respond to current problems may well be discarded, but others will be retained in a gradual process by which small changes cumulate to bring about major shifts of policy or structure.

CHAPTER I

SUMMARY OF EMERGING POLICY DIRECTIONS

The enhanced political significance of vocational education and training

11. The Joint Working Party has identified a number of significant policy directions which are emerging in OECD countries, even though their systems and policies differ. It will be essential to develop further these new directions if vocational education and training is to satisfy the heavy economic and social demands being placed upon it. The various levels of government together with employers, unions and education and training institutions which share the responsibility for negotiating policies and developing systems should together consider the specific actions needed in each Member country.

12. Most OECD countries have made a major political commitment to providing extensive opportunities for vocational education and training. This commitment, which is long-standing in some countries and more recent in others, is a response not only to the prevailing economic and employment situation but to recognition of the role that vocational education and training - an essential part of education and labour market policies - can play in the future economic development and performance of OECD countries and their social development.

Strengthening the economic and social roles of vocational education and training

13. It is becoming more than ever clear that human resources are as important a part of the economic and social infrastructure as fixed capital investment because they are essential to the development and utilisation of capital and technology. Consequently, vocational education and training are progressively making a more explicit contribution to economic development in support of other areas of policy, such as industrial, technological and regional development policies. This is being

done through specific practical measures to facilitate innovation: the development of technology; the creation of viable new firms; growth of productivity. (Paras. 74 to 83).

14. Efforts to reform vocational education and training to meet new social demands are intertwined with these economic tasks. Major changes in the composition of their labour forces, which will continue to occur for some time yet, are leading OECD countries to offer more variegated vocational education and training so as to help specific groups, such as adolescents and young adults, girls and women, foreign workers and their children to enter into employment and to help adults threatened by unemployment to keep their jobs. (Paras. 120 to 148).

15. The higher than average rates of unemployment among these groups in most countries is one indication that there is still scope to extend vocational education and training in order to reduce disparities in opportunities for access to employment. This is not a matter of setting priorities among them or merely devising special programmes. The different needs of these groups must be met simultaneously and within the framework of established policies and systems if the danger of new forms of segmentation are to be avoided in education and in the labour market. Moreover, the emergence of multi-cultural societies in several OECD countries calls for reforms at all levels of vocational education and training to help reduce the risks of social and racial segregation.

16. Much of the interest in vocational education and training, and its rising status, arise because a trained person has better chances of access to employment, higher income and satisfying work. There is also much evidence that, with few exceptions, the higher the level of qualifications the lower the risk of unemployment. At the macro-economic level the risk of unemployment can be reduced when training helps workers move to firms and sectors where productivity is high. (Paras. 102 to 108). It does not follow that training is an absolute guarantee against unemployment, nor that increasing the number of trained people will reduce aggregate unemployment. The task of reducing unemployment lies primarily with general economic policies. If expectations are raised unduly, there is a risk of disenchantment with vocational education and training. (Para. 33).

Raising the quality of vocational education and training and the skills of the labour force

17. There is a significant trend for vocational education and training to become more thorough, broader and of longer duration. This is helping to raise its status. However progress is uneven and could be accelerated. (Paras. 38 to 40, 44, and 110 to 119).

18. In some countries such as Austria, Germany and Switzerland traditional forms of training in dual systems which combine contracts of apprenticeship in an enterprise and part-time

training in institutions have been developed into mature systems providing high quality training. But these systems cannot readily be transposed to other countries which have not enjoyed a long tradition of training. In countries where only some young people receive initial training by apprenticeship, consideration is being given to improving and possibly extending it. In addition, new ways being devised in several countries to combine classroom instruction and work practice, other than by contractual apprenticeship, hold great promise for developing both productive capacity and individual abilities. The common aim of these methods should be to create a dialectic process between learning and work, so that each nourishes the other and so that vocational education and training become a means, not only of meeting current needs, but of transforming jobs and of creating new kinds of activities. (Paras. 99 to 100). Combining periods of part-time study and part-time paid work is also a particularly useful way of helping large numbers of young people move from full-time education to full-time employment. (Paras. 119).

19. Improving the quality of vocational education and training is a major concern in some countries. It depends on developing a complete and effective set of arrangements for the design and inspection of facilities and programmes and for certifying professional competence. (Paras. 111 to 115). Whilst some countries need to create complete systems, others could strengthen them at particular points.

20. In several OECD countries vocational education and training are becoming more effectively linked to employment by such means as broader training in the personal and social skills needed in the labour market; the organisation of technical curricula into fewer and wider categories to enable workers to acquire key, generic or basic skills that can be widely applied; increasing off-the-job training, and the spreading use of the modular organisation of curricula (Para. 107) as well as combined work and training. These different methods could, if more closely related, greatly improve the quality of vocational education and training.

21. The extension of such developments is important in increasing mobility and enabling the labour force to adapt its qualifications. In making it possible to expand training opportunities ahead of the specific current demand for labour, it can help workers take advantage of, and create, new opportunities which will enable them to attain greater security in the labour market as an alternative to contractual security in a job which can disappear. It helps break down some of the segmentation in the labour market among industries and occupations. Consequently it helps create the conditions for economic recovery and long-term development, and eliminates dependence on estimates of shortages (Paras. 95 to 98) and on manpower requirements forecasts which can be misleading and dangerous. (Paras. 93 and 94).

22. Training in specific manual operations for a given task is disappearing in favour of a long process that resembles the generalist view of education, and indeed cannot be separated from it. (Para. 38). Its duration is being extended, even though more

efficient methods make it possible to learn a given skill more quickly. It is being started earlier in school, with the recognition that early general education has functional applications as well as being worthwhile for its own sake, and that it is the only phase of education during which all new entrants to the labour market can acquire the basic skills needed to survive in it. Initial skill training often has to extend beyond the formally recognised period of training in order that it may be adapted to a specific job. Further advanced training is increasingly being called for as technical tasks become more difficult and complex and continuous learning is becoming essential in many jobs. (Paras. 87 to 92).

Organisation, policy development and management

23. Such changes in the content, quality and duration of vocational education and training call for new patterns of organisation in education, some of which are beginning to emerge. There are indications in some countries of a shift in the balance of studies within the liberal arts and humanities to include components with a more explicit functional relevance, coupled with a relative shift in enrolments and expenditures from university institutions to several new types of short-cycle and other third-level institutions. The recognition that the pedagogical value of vocational and general education can be equal has yet to be reflected in a vigorous opening up of lines of access from initial skill training to higher levels of technical education and general education. The steps being taken to create better training opportunities for new entrants to the labour force could in time develop into longer-duration initial skill training. Thus, there is a need for countries to monitor and guide their systems in order to meet changing needs and use resources effectively.

24. Maintaining progress in the implementation of large-scale commitments to vocational education and training depends significantly on effective arrangements for consultation and co-ordination among the many interests: different levels of government, employers, unions, individuals, education and training institutions and voluntary bodies. Despite diverging views about the responsibilities of the State and enterprises, there is much agreement that some kind of central arrangement is needed in each country to oversee the system and guide its development. The emerging role of the State may be to create a framework within which the various interest groups can meet rather than to provide the overall supervision. Whatever the arrangements countries find appropriate, high priority tasks are to secure a consensus about the organisation of practical training in firms; the co-ordination of curricula in institutions and in firms; the arrangements for certification and standards. It is particularly important to reconcile industrial restructuring and development with the skills and interests of workers in local labour markets through new arrangements to link together the industrial and regional dimensions of initial and further skill training. (Paras. 45 to 51).

25. In most countries, the best method of financing vocational education and training is a major unresolved problem (Paras 152 to 161). In some countries the provision of public and private funds has grown into a complex set of arrangements without an overall rationale. Sometimes this complexity has reached the point where governments and employers do not know the share that each is contributing to the overall effort on vocational education and training at all levels. (Paras 150 and 151). On the other hand, it is not reasonable to expect that one simple and universal funding mechanism can be developed which will be seen as apportioning the financial contributions of governments, employers and individuals in a completely equitable manner. However, there is little doubt that most public authorities will have to make a significant, and in some cases greater, contribution to the cost of at least some types of training. Given the doubt, however, that public expenditures can remain at recent levels, there may well have to be some reallocation in favour of training. In many countries other sources of funds may well have to be considered such as securing a larger proportion of support from employers. The Joint Working Party also noted the fairly limited experiments to use unemployment benefits for training purposes.

CHAPTER II

MAIN CONCERNS, AIMS AND CONSIDERATIONS IN CHANGING POLICIES

26. In considering the ways in which policies and systems of vocational education and training are changing it is essential to distinguish three main sets of concerns that are reflected in national policies: economic and social concerns; education and the labour market; political considerations and policy institutions. This distinction is made arbitrarily for the purpose of discussion because concerns overlap and are closely interrelated. The weights given to them vary and the final shape of policy depends on the different ways in which they eventually come together in each country.

Economic and social concerns

27. A central concern to OECD countries at present is how the contribution of vocational education and training to economic performance and development can be strengthened. A sustained recovery from the economic difficulties that most OECD countries have known since the early 1970s will be contingent on a restructuring of their economies to respond to an intensification of world-wide competition; a changing division of labour between the industrial nations and the developing countries; the scarcity and rising costs of raw materials and energy in some countries and a relative abundance in others; and the ways in which the new technologies are used. This is more than a matter of conjunctural economic management: OECD countries are entering a period in which the character of economic development is likely to change considerably. To take a simple example, the interest in the environment and rising imported commodity prices may be the early stages of a shift from an extravagant throw-away economy to one of conservation and maintenance. Such considerations will make heavy demands on the production network, on employees and on management to innovate and adapt. Vocational education and training as a whole have still to adapt to this new situation.

28. Although it is widely recognised that vocational education and training constitute part of the social and economic infrastructure, the specific contribution they can make to individual or overall economic performance has not convincingly

been proved by analyses of rates of return or cost-benefit studies. In principle, such studies should cover not only specific occupations and branches of industry (such as agriculture, construction, transport, manufacturing, retail and wholesale trade, banking, and government administration) but all training efforts and their effects on technical qualifications, on joint consultation between workers and employers, on industrial culture, etc. The theoretical assumptions and practical use of rate-of-return and cost-benefit analyses are now widely questioned. In any case they are not a substitute for policy or for devising practical ways of helping solve specific problems.

29. If vocational education and training are to exert a more positive role in shaping the economy, social opportunity and the lives of individuals, their basic aims must be more precise, and clearly articulated with broader social and economic aims.

30. It often happens that vocational education and training policies are not closely linked operationally with the general economic, industrial, regional, scientific and other policies of governments. Governments have often made decisions about trade, economic policy, investment or regional development, and sometimes even education, without taking vocational education and training into account, so that it has not become part of overall public policy. Correspondingly in many though not all firms, planning is concerned with products, investment, sites, buildings and plant, and only then with people. Employers often expect to hire people off the street, all ready trained. The status of some types of vocational education and training is still low except in a few countries, such as Switzerland. Whilst some countries have traditionally allocated a high priority to vocational education and training as a means of developing transferable skills in the labour force, their status generally needs to be improved.

31. The ways in which other policies are formulated also make it difficult to relate education and training policies to them. Economic policies usually work through very general instruments, and most conjunctural measures are inevitably stop-go. Industrial development policies are often not made explicit. Experience in Australia and Canada has shown that bringing in skilled immigrants and training the domestic labour force are two alternative sources of skilled manpower, and that serious problems arise if they are not co-ordinated.

32. The different time-horizons of employment and of vocational education and training policies are a fundamental consideration in any attempt to relate them to each other. The constitutional separation of powers, particularly in federal countries, has to be borne in mind in trying to co-ordinate them. Yet vocational education and training can be part of a well-shaped policy and more closely related to specific changes in other fields of policy. The main need appears to be for a long-term commitment to the development of vocational education and training as a vital part of overall policy. It is probably only at the level of governments and heads of enterprises that a change of attitude in

this direction can be initiated, but it must concern trade unions and society as a whole.

33. A major current concern is of course how vocational education and training can be developed in a context of high levels of unemployment, constraints on public expenditure and uncertainties about future levels of employment and its composition. In several countries the measured labour force is kept lower than it might have been by the relatively large proportions of young people that remain in general education or initial skill training after the end of compulsory school, and in recent years it has been further reduced by large-scale special measures for school-leavers. At the same time, given the uncertainty about whether or where there will eventually be jobs for these, a central question is what kind of vocational education and training can be provided which will enhance their chances of employment. It is widely agreed that it is not the role of vocational education and training measures to create jobs, but trained people can better cope with the problems of unemployment than the untrained(1). They are an important complement to policies to restore higher levels of employment. For this purpose it is essential that initial skill training should be broad enough to help workers become flexible and mobile.

34. Although economic and social considerations can be discussed separately they are hard to distinguish in practice, and the weight given to each of them can change. In some OECD countries the importance given to the social aspects of vocational education and training has been relatively strong in recent years, e.g. in Finland, France, Italy, Norway, Sweden and the United States. Indeed, some specific social aims have become more important despite the difficult economic circumstances of many OECD countries.

35. One of these social aims has been to improve the working lives of members of the labour force. There is a strong movement in several countries to do this through improved preparation in school which will help people manage their working lives better, and make them better able to recognise their own interests and abilities and the opportunities in the labour market. The wider extension of this approach may not be subject to financial limits since it is primarily a matter of change of emphasis which can probably be achieved with little or no increase in costs.

36. Interwoven with these questions is a persisting concern to reduce disparities, especially through efforts directed towards specific groups in the labour force: new entrants; girls and women; migrant workers and their children. For example in Italy the Law of Equality (1977) guarantees equal rights for all. A major concern of several countries is to reform secondary level education so as to avoid it being a process through which existing social class divisions are reproduced. The rise in unemployment

---

1. See "Report on Vocational Education and Training", op. cit.

among adults does not yet seem to have received enough attention by governments or firms. The provision of vocational education and training to these groups entails the development of new organisational arrangements and teaching methods. Moreover, questions of priority and cost arise because many people in these groups can only be brought up to normal or average standards of qualification and performance after long periods of receiving special help.

Education and the labour market

37. Vocational education and training are an inseparable part of the process of learning. As a means of developing the human resources that constitute the supply of manpower they are also an essential component of labour market policies. Policies for vocational education and training could become a bridge between education and the labour market. In some ways the interests coincide, but in others they can only be reconciled by changes in public or employers' policies.

38. The scope of vocational education and training, as it was defined at the 1978 Intergovernmental Meeting on Vocational Education and Training, is a process which covers all stages of learning related to work(1). At the early stages in schools the content is indistinguishable from that of general education: the basic educational competences and social and personal skills needed for adult life as a whole have functional applications in working life. In later stages there is usually a progressive increase in specificity, linking the content to occupations or jobs in the labour market and in different productive sectors. Yet even these phases are not in principle different from general education insofar as they help participants learn to solve problems, become self-reliant and develop their personalities through their interests. The recognition that so-called "general" education and vocational education and training have the same value or importance is essential in the future development of vocational education and training as part of a liberal education for most, if not all, students in school, and in extending access to higher education for those who have formal employment qualification or practical employment experience. Skill training is coming to look more like the traditional view of "education" and less like the traditional notion of instruction in how to carry out specific procedures. This kind of vocational education and training is a process that takes a long time. It is being extended into the early years in school and during working life. The BIAC and the TUAC both agree that claims to reduce it must be resisted.

---

1. "Report on Vocational Education and Training", op. cit.

39. The OECD has drawn attention to the need to modify the curriculum in schools so as to help students learn how to apply knowledge as well as simply acquire knowledge for its own sake(1). This is well reflected in a study by the French government(2). There is interest in several countries in reforming the organisation and content of school curricula. In this process the initiatives taken by many teachers to find out how their subjects can be used in working life and to modify their methods is probably the single most important factor. It is widely agreed that whilst the process of vocational education and training must start in compulsory education, schools should not attempt to provide training for specific jobs. In the later stages of vocational education and training, the method of teaching could be greatly improved. It may be of high quality in some institutions, special inter-enterprise workshops and firms; but in some countries in workshops and in firms where it takes place at the point of production often training often varies in quality. The large-scale creation of special programmes for new entrants to the labour force has brought into the task of teaching many people who are untrained and unskilled, so that there is a need to review the staffing and design of these programmes. Thus, generally improving the quality of vocational education and training remains an important policy concern.

40. The reforms of vocational education and training being developed in OECD countries reflect a variety of different aims:

i) In several countries the training programme includes general studies. For example, in Switzerland apprentices have, each working week, 8 to 12 hours of study for both general and technical subjects. In Austria some language instruction is given.

ii) In several countries, e.g. Austria, France, Germany, Switzerland and the United Kingdom, people with technical and vocational qualifications can be admitted to university-level studies in scientific and technical subjects.

iii) A few countries, e.g. Canada (in Québec), Sweden and Yugoslavia have adopted comprehensive upper secondary education which gives students both initial skill training and general education. In Sweden all who have completed this level, whether general or vocational, can be admitted to university if they have the specific qualifications for admission to the courses they want to follow.

---

1. "The Competences Used in Working Life", OECD, derestricted document, Paris, 1982.

2. Savoirs et savoir-faire à l'issue de la scolarité obligatoire, Ministère de l'Education nationale, France.

iv) In a few countries it is possible for people with work experience or employment qualifications to be admitted to general university-level education if they have the specific qualifications needed for entry to given courses. Finland intends to reserve 5 to 25 per cent of entries to university faculties for students who have chosen the vocational route after comprehensive school. In Sweden, as a matter of public policy, anyone with at least 4 years' work experience, paid or unpaid, including housewives, can be admitted to university, and can be helped obtain the qualifications for entry. Similar arrangements for the admission of mature students who lack the qualifications traditionally required for entry exist in some university-level institutions in other countries, e.g. in Austria and the United Kingdom.

v) A few countries are trying to raise the status of manual work by increasing lower level wages and publicising the value of craft work. This is being done for its own sake. Vocational education and training should not of course be equated solely with manual work.

vi) In some countries, notably Germany, Austria and Switzerland, many people who have completed an industrial or craft apprenticeship or training in an enterprise have reached middle or higher management jobs, sometimes after further training in institutions or within an enterprise. In Germany and Switzerland it is possible for qualified tradesmen to be given training to the level of master craftsman in industrial, craft or commercial occupations which gives them a career that is highly regarded.

41. The effect of such innovations on the status of vocational education and training is far from clear, primarily because status concerns the attitudes of students, employers and the community as a whole. In addition there are other practical problems. Some of these approaches remain limited in scope, for example the time available for general studies to trainees in enterprises, or opportunities for people with vocational and technical qualifications to cross over to university-level general studies. The fundamental difficulty is that it is still widely thought that theoretical and abstract reasoning is superior to intuition and to manual dexterity and technical knowledge. Vocational education and training are often given to low achievers, and remain the main option for those young people who do not go on to upper secondary education. The TUAC has pointed out that for these vocational education and training are often given without the same safeguards as general education, e.g. inspection and control. Thus, there is a danger of thinking in terms of a hierarchy of learning opportunities which gives the highest status to university-level studies. In some countries, e.g. Canada, post-secondary programmes are designed for their own sake, and transfer to university is not their primary aim. Quite apart from the claim that all workers should have access to the cultural riches of OECD countries, it may well be that future social and economic development will increasingly depend on members of the labour

force possessing both technical skills and a highly developed sense of judgement. Yet it seems that the ability of vocational education and training to develop the qualities of independent, critical thinking, usually associated with general education, has yet to be recognised and fully utilised.

42. Education and labour market policies have a common interest in reducing social disparities. Inequalities can arise and even be aggravated in both education and the labour market, and concerted policies by the education and labour market authorities are essential if the problems of specific groups are to be treated in a comprehensive way. Such an approach seems more likely to be effective than uncoordinated action or action in only one field of policy. However, it has to be admitted that so far social disparities have proved highly resistant.

43. The economy has to produce goods and services, and people have to have jobs. It seems, however, that labour market authorities and employers often look to vocational education and training to supply their diverse needs for manpower but are not in fact able to specify their needs precisely. There is a continuing issue of whether and how vocational education and training have a role in the day-to-day functioning of the labour market. There is wide agreement among Member countries, the BIAC and the TUAC that vocational education and training must not be too narrowly related to present-day requirements.

44. One fundamental problem in the development of policies is that the time-horizon within which learning takes place and has an impact is long compared with the rapid changes that take place in the labour market. This is one of the prime reasons why it has not been possible to plan vocational education and training on the basis of forecasts of occupation or skill requirements. Decisions by firms to create and suppress jobs, and by individuals to change their employer or their occupation, take place more quickly than changes in vocational education and training, even short-term retraining. In this sense, the BIAC has suggested that shortages and scarcities cannot be solved by education and training, although in the experience of several OECD countries these problems can be alleviated through both training and employment measures. The modular organisation of curricula can allow individuals to build on their knowledge, skills and qualifications more quickly than through traditional long courses, and thereby reduce the time-horizon of vocational education and training.

Political considerations and policy institutions

45. Vocational education and training, like any form of education, confer power. The power they confer depends on access to training, and in turn influence access to jobs; performance in a job; individual and collective action by workers about working conditions, pay, promotion and work satisfaction. Thus they alter the balance of power between employers, individual members of the labour force and unions. Because the costs are shared between

governments and employers the degree of control over vocational education and training that each of them will have is an important political concern underlying the debate about financing. One view in several countries, and stressed by the TUAC, is that education of all kinds, including vocational education and training, should be a public service subject to public control in order to protect the interests of the individual. It is the view of some countries that a public service also protects the interests of firms. However, it is the view of other countries, as well as of the BIAC that vocational education and training at the initial skill level are best provided by firms, which alone know how the production of goods and services, and markets for them, are developing. There is, however, wide agreement in all countries that schools cannot and should not provide specific job training. The overall process of vocational education and training in all countries is partly public and partly private, the division within each country being historically and politically determined.

46. There is a trend in several countries towards decentralisation which takes a variety of forms. Examples which concern vocational education and training are the decentralised administration of Comprehensive Employment and Training Act (CETA) in the United States through local sponsors and the commitment of the new government of France to decentralisation. In Italy the responsibility for vocational education and training has been transferred by the central government to the regions, which may in turn transfer it to the provinces or to city councils. What is common among these different approaches is that they bring vocational education and training nearer to local labour markets. This is not, however, an inevitable trend that would have taken place in the absence of a political commitment.

47. In the arrangements for the formulation of policies there is a wide range of institutions and practices in Member countries. Their main functions differ greatly according to whether they are advisory, consultative or decision-making. France is the only OECD country with a separate Ministry for skill training. This Ministry has two responsibilities: it defines and guides the policy for skill training in collaboration with the social partners, and within the framework of that policy it co-ordinates the specific measures of several ministries. Initial training remains the exclusive responsibility of the Ministry of Education. In some countries there are special agencies outside the government, linked to national policy discussion in a variety of ways. In Ireland there is a Training Agency (AnCo) responsible to the Minister of Labour. In New Zealand, following a report by the New Zealand Planning Council in 1980, the Vocational Training Council which advises the Ministers of Education and Labour and was primarily responsible to the former, has now been made responsible to the latter. In several countries there has been a tendency in recent years for education authorities to take greater responsibility for vocational education and training.

48. In federal OECD countries the arrangements for policy discussion are even more complex. In most of them education is a state or provincial jurisdiction and labour market matters a

federal one. In Australia the Technical and Further Education Council (TAFE) is part of the Tertiary Education Commission, which has a key role of linking the Commonwealth and state governments in the process of allocating finance to the states. In Canada the provinces make their own policies for vocational education and training. The federal government influences enrolments by purchasing some places for students with a view to adapting the occupational pattern of training to the needs of the national economy. This is done through a series of Federal-Provincial Manpower Needs Committees, meeting on a regional basis as required. In Germany the Federal Institute of Employment has responsibilities for the financing of retraining and further training. In Switzerland there is a close co-ordination between the cantons, which have the exclusive responsibility for education, and the federal authorities which are responsible for training. In the United States, where arrangements are at present under review, policies are primarily formulated by the states which provide ten times as much finance as the federal government. In Yugoslavia the responsibility for policy lies with each of the republics.

49. The arrangements for consultation among governments, employers and unions are well-developed in most countries with regard to policies for initial and further skill training, mainly through the special agencies outlined above but could probably be strengthened in the earlier stages of vocational education and training in schools.

50. The development of vocational education and training policies cannot satisfactorily be decided at the national level alone. In reconciling the interests of employers and members of the labour force it is necessary to bring together the interests of the various branches of industry or sectors on the one hand, and of the labour force in local labour markets on the other. This can neither be planned nor left entirely to the unaided functioning of the labour market. In some countries arrangements for consultation about the needs of branches of industry have existed for many years, and there are some for the discussion of regional interests or of given occupations. Yet there is little experience of bringing them together. In France, independently of the arrangements for consultation about initial training, the introduction of further skill training policy takes place at the national and regional level. Each region has a committee for training, social development and employment which brings together, under the authority of the Prefect, the regional authorities and the social partners.

51. Finally, there is a trend in several countries towards wide public discussion. Several countries have issued reports intended to generate public discussion and comment: for example U90 in Denmark; l'Education des Adultes in the Province of Québec in Canada; A New Training Initiative in the United Kingdom. In Germany the Federal Minister of Education and Science is required by a law of 1977 to submit to the government and the public at the beginning of each year a report on vocational education and training. In Yugoslavia continuing discussions at the local level

between enterprises and schools are a key feature of policy and programme development. These various reports aim to provide members of the public with information about policy changes that are needed and to help create not only a climate of acceptance for government measures but an awareness of the responsibilities of employers, unions and individuals themselves.

New policy directions in selected countries

52. In several OECD countries possible future directions in vocational education and training policies have been explored in reports recently commissioned by governments. In others new approaches are being implemented.

53. In Australia the Report of the Committee of Inquiry into Education and Training in 1979 (the Williams Committee) followed a wide-ranging national enquiry into education and training needs. The Committee reviewed both the provision of education in preparing young people for work and the relationship between the educational system and the labour market. Included among its major recommendations were: proposals for the growth in the number of students in education and training institutions should be related to prospective growth in the Gross Domestic Product; a National Centre for Research and Development in Technical and Further Education should analyse skills required for various middle-level and trades occupations; state authorities should have greater responsibility for rationalising and co-ordinating technical and further education in the next 20 years. The Committee also emphasised the need for devising more measures to facilitate the transition from school to work, including vocational education that is complementary to, or part of, general education and extended guidance and counselling and work experience programmes. The government accepted a number of the Committee's recommendations and has accorded priority to others. For example, it has developed a comprehensive policy for the transition from school to work which will provide additional grants of A$150 million during 1980-1985 for special measures, and matching grants from the states in the later years. The aim is ultimately to provide all young people in the 15-19 age group with options in education or training or employment or any combination of them, either part-time or full-time, so that unemployment becomes the least acceptable alternative. The government has also decided that priority will be given to improving the quality of technical and further education, and improving skill training, including pre-apprenticeship, pre-vocational and pre-employment courses for young people, particularly for trades and technical occupations where shortages of skilled workers exist.

54. In Austria vocational education and training traditionally have been carried out immediately after completion of compulsory school either by employers with complementary school instruction (dual apprenticeship) or full-time in schools. Both apprenticeship and the full-time school vocational training have had to cope with vastly growing numbers of trainees. There has

been some competition between the two and with upper secondary general education. National guidelines concerning the content and extent of apprenticeship and related occupations have been grouped together, and the links among related occupations have been explicitly stated. Equivalent qualifications for the full-time school of vocational education and training have already been negotiated or are being negotiated for new specialisations, which generally comprise families of occupations. In 1978, by an amendment to the Vocational Training Act (Berufsausbildungsgesetz), the conditions under which firms train apprentices were further specified, and now include the qualifications which a Meister/Werkmeister must have before he is allowed to train apprentices. A considerable investment in the building, equipment and running of full-time vocational institutions has had to be made in order to meet the rapidly growing interest in it by pupils, parents and employers. To improve the chances of adults a number of experimental vocational programmes were initiated by an amendment to the Schools Organisation Act in 1975. They were designed to eliminate dead-ends in education and training and make full use of the adults' experience and skills. The aim has been to keep these courses as short as possible and to offer an efficient modular system of certified qualifications linked to established certificates. In order to liberalise and facilitate the lives of adult students an Act on the interior organisation of courses for adults will be passed in the foreseeable future.

55. In Belgium attention is being focussed on the need to introduce major reforms in education with a view to its better adaptation to working life and adult life as a whole. The essential need is to eliminate some major problems concerning

i) the rigidity of structures based on

a) stratification by age;

b) the segmentation of courses and lines of study;

ii) the lack of specificity in educational objectives.

To introduce fundamental improvements innovation will entail reorganising curricula according to modules particularly with a view to

i) harmonising general, vocational and technical education;

ii) breaking down barriers between studies in school and outside it;

iii) eliminating the phenomenon of rejection caused by failure in school when a system of pass or fail exists.

With a view to extending compulsory education pedagogical experiments are in progress in the second year of secondary technical education, e.g.

i) the use of projects;

ii) practical workshops in schools;

iii) the use of multi-disciplinary approaches.

The present government wishes to increase the responsibilities of the 25 sub-regional Employment Committees which bring together representatives of workers, employers and government departments. On them the national education authorities are often represented by school principals who thus become sensitive to the problems of how vocational education and training are interrelated with available jobs. The sub-regional committees have also the task of proposing the creation of training courses outside the schools by the National Employment Office.

56. In Canada vocational education and training are the subject of a complex sharing of responsibilities between the provinces and the federal government which are governed by the Constitution and political agreements. The provinces provide preparation for working life in schools and initial and further training in Community Colleges and Technical Institutes. The federal government has a responsibility for the national economy and for facilitating equality and equitable access to national programmes. Both orders of government provide counselling services in education and the labour market. Both have powers of taxation and the federal government makes fiscal transfers to the provinces for post-secondary education which are roughly equal to half the gross provincial spending on it. The federal and provincial governments together attempt to adapt the supply of manpower in some designated occupations. For some years attempts have been made to encourage employers to assume a greater responsibility for initial and further skill training, but with limited success. A Federal Parliamentary Task Force(1) recently drew attention to shortages of skilled workers, the high average age of skilled workers, and the functional illiteracy of more than a quarter of all Canadians. Its many recommendations include creating a National Council of Employment and Training Ministers to implement a national employment and training plan; steps to expand training through collaboration with the private sector; priority to on-the-job training; the need for more instructors; better equipment and more opportunities for further training and retraining; more and better apprenticeships; better living allowances; and affirmative action in favour of women, natives, minorities and the handicapped. It notes that many employers do not provide training because it has been easier and less expensive to get skilled personnel through immigration, and recommends that employers wishing to bring in skilled immigrants must commit themselves to a long-term plan to train Canadians. It proposes strong fiscal inducements to employers to train through a payroll tax with exceptions for training plus deductions from corporate tax on a progressive scale. Also in 1981 a Task Force of the

---

1. Work for Tomorrow, House of Commons, Ottawa 1981.

Department of Employment and Immigration(1) proposed increasing training for Canadians with only selective immigration to meet unanticipated demands. It suggests a redistribution of resources and services from both low-level skill training and university education to high skill training, coupled with incentives to enterprises to create jobs and training and direct financing of students. There is also considerable discussion in the provinces about the reform of systems and policies. For example in Québec a recent report by the "Commission d'étude sur la formation des adultes" favours comprehensive education to give everyone the opportunity not only to master what he needs for his job but also to acquire the knowledge necessary for his own development. A wide concept of vocational education and training is urged which will contain subject matter that is vocational, general, social and cultural. The Commission underlines the need for new pedagogical approaches and the creation of teaching teams to eliminate the divisions inherent in existing approaches based on academic disciplines. It proposes funding to make broader vocational training available to everyone. Among specific measures proposed are a an Office of Adult Education, and extensive regionalisation of the system, including sectoral committees to identify regional and local manpower needs.

57. In Denmark vocational education and training are included in the report in 1978 by the Central Council of Education entitled U90: Danish Educational Planning and Policy in a Social Context at the End of the 20th Century. This and an OECD review based on it have generated a wide public debate. The report argues that education, skills and knowledge should be given high priority as a basis for Denmark's future economic development and quality of life, and considers it a basic principle that "nobody who is physically and mentally able to work should be allowed to leave the educational system without having a basis for participation in working life". Further, vocational education and training must be wide enough to offer several opportunities for each individual to acquire a position in the labour market and, if required, to change jobs. Everyone should be able to return to the education system on his own initiative to acquire skills and knowledge. By 1990 there should be sufficient alternatives for all 16-19 year-olds to obtain vocational or academic qualifications to enable them to continue in further training or education without interruption. No one should seek a qualification so narrow that it only qualifies for a special job; everyone should aim to have a broader and general vocational qualification. Proposals concerning adult education are seen as a continuation of the main principles relating to the education of young people, geared to more mature needs: "U90" proposes that people should be entitled to release for education and training during working hours and receive an allowance for any wages lost in the course of their further studies; whilst those unemployed should be given the opportunity to follow a course of study without losing their right

---

1. Labour Market Developments in the 1980s, Department of Employment and Immigration, Ottawa, 1981.

to receive unemployment benefit. This report is a good example of how some countries view vocational education in the context of both education and labour market policies.

58. Also in Denmark the Parliament outlined in 1980 the general principles for innovation and reform in the field of youth education, many of which concern vocational education and training. Each pupil must be given the choice among several courses by expanding the number of courses and making them more widely available geographically. These courses, building directly upon compulsory education, will provide the foundation for further and higher education and for employment. Students who require special qualifications for a particular course or occupation must be given the opportunity to supplement their existing qualifications. An active effort must be made to help those young people who are not motivated to continue their education after compulsory school or who otherwise drop out of the system prematurely. This will include setting up special introductory courses and short-cycle courses within the framework of basic vocational education. Students should also be able to amend their choice of course with a minimum prolongation of total study time. Modular courses will give students the opportunity to leave the system at different points with clearly defined qualifications; and this should be combined with the right to return to education if and when the individual feels the need for higher qualifications. The content of all courses must be broad and varied to give students the necessary background to qualify for employment or for higher education. They should include periods of practical job experience which should be brief for students at upper secondary school or on preparatory courses for higher education. Guidance services will be expanded partly with a view to stressing equality among different educational opportunities. Education must be made available free of charge and efforts should be made via subsidy schemes to ensure that a young person's choice of education is not distorted by his or her economic situation. To close the educational gap between the generations, adults must be assured of more educational opportunities. To offer all young people an education, it will be necessary to develop a clearly defined and co-ordinated system of courses and to plan and control them in the context of a single, overall system of education. All courses must be planned and controlled jointly by central and local government, both sides of industry, and other groups who traditionally participate in developing and planning courses. The parliamentary proposals recommend that innovation in schools should be continuously developed in accordance with these principles. Some initiatives have been taken or are being planned to apply them. For example, the capacity of the efg-system has been increased, bringing the total intake possibilities up to 45 per cent of a generation of young people in 1981, with further increases foreseen; and a new system of co-ordinated enrolment to the efg-programmes and the general upper secondary programmes.

59. In Finland the 1978 law on the development of education for the age group 16-19 years (and parts of older age groups) and the successive directives of the government have the following principal goals:

i) Initial vocational education and training are guaranteed for the whole age group 16-19.

ii) They must meet the quantitative needs of the labour force in all sectors of the economy.

iii) They must prepare people for the qualitative aspects of working life and continuing changes in it.

iv) They must meet changes in society such as increasing international co-operation and equal opportunities for both sexes.

v) After the compulsory comprehensive school initial vocational education and training are largely organised in broad basic lines (for clusters of occupations) which, after the first year, separate into several specialised lines so that the total length of training ranges from a minimum of 2 years (e.g. for metal workers) to a maximum of 5 years (e.g. for engineers).

vi) After the senior high school (to which about 50 per cent of the age group continue after comprehensive school) the students who do not enter the universities can enter vocational education and training institutions. The vocational aims of the courses will be the same as those in the comprehensive school but the length of education will be from 1.5 to 3.5 years.

vii) Specialised training by apprenticeship programmes will complete instruction given in institutions.

In 1978 the Finnish government also adopted a resolution stating that the principles of life-long education will be followed in the development of adult education, and that a system of further vocational education and training will be organised. The reform of initial vocational education and training has begun with experimental work in some institutions. The organisation of a system of further training for adults is being considered by a planning commission. Finland emphasizes very strongly the importance of initial vocational education and training, which give a broad base to further specialised education and work orientation in enterprises. Good initial vocational education and training mean flexibility and possibilities for mobility in working life. It is noticed that young persons who have a good education are rarely unemployed for long, and an adult who has had a good initial training more often takes part in further training.

60. In France the government is introducing in 1982 a policy for the vocational education and training of young people aged 16 to 25, and particularly of those aged 16 to 18 leaving the education system without an employment qualification. In effect it considers that even though vocational education and training do not by themselves resolve the difficulties of employment it is one of the foremost tools in the fight against unemployment: in the short term it facilitates the placement of trained young people

and in the medium and long term provides a reserve of labour capacity that can be mobilised for economic development. The measures adopted will be put into operation through an interdepartmental approach. They are inspired by the proposals made by Professor Schwartz in a report commissioned by the Prime Minister(1). For the education system the Ministry of Education will, in contrast with recent years, have extra resources to increase the capacity of technical and training institutions and to hire more teachers. Most of the extra resources will be devoted, under the fight against inequalities, to priority zones which have high rates of school failure, poor training facilities for young people, and large numbers of children from disadvantaged homes or who are not French-speaking. Moreover the Ministry of Education is continuing the policy of opening schools to the world of work by the development of periods of instruction in firms for young people taking vocational education and training. The modernisation of technological education is also being undertaken by introducing new technologies in curricula around common cores. For young people from 16 to 18 leaving school without an employment qualification the Ministries for National Solidarity and for Youth and Sports have been given the task of identifying and guiding the most disadvantaged young people towards opportunities to enter society and employment, and the Ministry of Training has been charged to create 100,000 opportunities for combined employment and training for these young people. They will be helped obtain a qualification leading to a stable job by means of a pedagogical approach combining theoretical instruction with experience in an enterprise for periods of from 6 months to 2 years. The organisation and introduction of these facilities will bring together members of local governments and the social partners. Established and approved bodies for training will be responsible for counselling and pedagogical progress of the young person who will have the status of trainee and will receive an allowance.

61. In Germany the goal of vocational education and training policy since 1974 has been to provide for all young people a qualification in a recognised training occupation. To ensure this the Federal Minister of Education is required to keep a watch on the supply of training places as well as on the demand for them, and to submit a report about them no later than 1st March each year. The report has to describe the probable further development of the supply of training places in the years ahead. If there are indications that there is a risk of an insufficient number of places the report has to include proposals to remedy the situation. To meet this aim the long-established dual system of vocational education and training part-time in firms and part-time in vocational schools is continuously being developed on the basis of the laws of 1969, 1976 and 1981. The number of trainees in the

---

1. L'insertion professionnelle et sociale des jeunes Rapport du Professor Schwartz au Premier ministre, La Documentation Francaise, Paris 1981.

dual system rose by one-third from 1976 to 1981, or to a total of 1.7 million, the highest ever recorded. At the same time the quality of training was continuously raised by such means as revised curricula for firms and schools; a better co-ordination of part-time training in schools and that in firms; improved training within firms; and the expansion of inter-enterprise training workshops to help small firms meet the curriculum requirements.

62. In Greece vocational education and training are relatively new. Each student has the right to choose between the general or the vocational and technical secondary school. The new government proposes to improve vocational education and training curricula in such a way as to bring them closer to its new economic objectives. Combined instruction and work practice have been introduced in two parts of the country. The in-service training in enterprises of teachers of vocational education and training is being organised. The education authorities are beginning to improve the equipment in technical schools. Practical training for students in higher vocational and technical training centres is now being organised for the whole country.

63. In Ireland the government aims to use vocational education and training to support its new economic and industrial development strategy. For example, the Industrial Development Authority (IDA), in consultation with the Industrial Training Authority (AnCo), may provide grants towards the cost of training programmes for workers in new industrial projects. A middle-level technician intensive training programme, begun as an experiment in 1976 to give unemployed young people middle-level skills known to be in demand, has been expanded.

64. In Italy, in the schools efforts are in progress to change teaching methods to develop practical interests and abilities through an introduction to elementary technology. The responsibility for vocational education and training was transferred in 1978 from the Ministry of Labour to the regions. The regional authorities mobilise opportunities in institutions in their areas, with high priority to further training and retraining. In designing these opportunities they aim to draw upon data and analyses from the regional observatories that are being set up by the Ministry of Labour. Experiments are in progress to develop combined initial skill training and employment.

65. In Japan, where the great majority of workers are employed and trained in one enterprise where they spend all their working lives, the law was amended in 1978 to adapt the vocational education and training system to cope with higher unemployment, particularly among older workers; increased numbers entering the labour market with high academic qualifications; and to develop the skills of workers in a society where the numbers of elderly people are increasing. The 1978 law is designed to accelerate vocational education and training in the private sector and redevelop it in public institutions. Within this framework the Third Basic Vocational Education and Training Plan established in 1981 for the years 1981-1985 proposes five main aims.

i) To give young people entering the labour market opportunities for access to initial skill training. This will involve expanded school-based vocational education and training and career guidance; further development of basic vocational education and training by enterprises; and qualitative improvements to basic training in response to technical innovations and increasing numbers of young people with high academic qualifications; and attempts to reinforce links with school education.

ii) To strengthen education and training for workers in employment by maintaining the dynamism of the private sector and meeting changing industrial structures and technical innovations. This entails prolonging the vocational lifespan and heightening the desire for individual self-development.

iii) To work towards effective training measures for the redevelopment of people who have been laid off or change from one job to another and for people who want access to a job.

iv) To develop an assessment system linked to each phase of a worker's vocational lifetime which will involve, inter alia, more varieties of trade skill tests, their improved quality and strengthened links among them.

v) To promote international co-operation in vocational education and training in a positive manner so that Japan can develop industrially in harmony with the global economic system.

66. The government of the Netherlands is proposing to reform the structure and curriculum of compulsory education for 12 to 15-year-olds which at present takes place in different types of schools, 65 per cent of the pupils attending general education and 35 per cent lower vocational education. The aim is to create a common comprehensive school for all pupils after primary education with a curriculum that is largely the same for all pupils. An important part of the common curriculum will be an introduction to technology, occupations and work in the home, recognising that this knowledge has become important in the world of today. It will include an introduction to the world of work which will explain the role of employment and of the individual in society; how employment is organised; how enterprises and service organisations develop; different kinds of jobs and occupations; the relation between paid and unpaid work; how labour relations are settled by law or bargaining; how the labour market functions; and the role of the employment agency. This curriculum is expected to play a part in the choice of further secondary education for which plans are being developed. It is certain that they will involve the opportunity for all 15 to 19 year-olds to experience vocational education and training.

The main characteristics of this plan will be:

i) courses of different duration (2, 3 and 4 years) for each branch of vocational education and training;

ii) courses of different levels related to social needs and desires;

iii) appropriate diplomas and certificates;

iv) a flexible connection with adult education.

Recently the Dutch government launched the first version of its "Plan for Employment 1982". By this plan, which has to be adjusted regularly, the government plans to use an integrated and more co-ordinated approach to tackle the problems of employment and unemployment. An important part of this plan is the "Youth Labour Plan" which is considered to be an elaborated version of the conception of a "Youth Guarantee". It is aimed at the 16 to 23-year-olds and includes both education and labour market measures. The educational measures entail expanding opportunities for vocational education and training, especially short courses of 2 or 3 years, and part-time courses which include learning at school as well as on-the-job. The labour market measures aim to limit the duration of unemployment for young people. Apart from courses for the young unemployed, social work and measures to create jobs for young people (including wage subsidies) the most important measure is the offer of a temporary job for a maximum of 1 year to young people who have been unemployed for 9 months.

67. In New Zealand the government is considering proposals in a report of the New Zealand Planning Council "Employment: towards an active employment policy" (October 1980). It advocates positive adjustment policies for structural and technological change in the 1980s, with the Department of Labour becoming the central source of policy advice, co-ordination, and leadership in the development of an active employment policy. The Council proposes a vocational education option for those young people who are at risk in making the transition from school to work, and improvements in skill training in its various forms, including adult retraining. The proposed vocational education option, covering both labour market entrance skills and basic skills of a related group of occupations, is designed either for students leaving school or, alternatively, from the age of 14: although the option would be open to all students, it would be intended to attract young people who would otherwise leave school with few qualifications. The Council suggests adult training and retraining schemes to give broad-based training in clusters of skills, followed by the acquisition of specialist skills as a topping-up process to meet changing skill requirements. Streamlining the apprenticeship system is also a high priority.

68. In Norway a report in 1980 by the Ministry of Church and Education to the Parliament proposed guidelines for future policy on the relationships between education and work, some of which correspond to the conclusions of the OECD Report on Education and

Working Life(1). The main aims proposed are to create a better balance in teaching between theory and practical activity; to put a higher value on employment experience for access to further education; to prevent greater inequalities between those with and those without higher education; to develop a closer interdependence between education and employment; to give young people a choice between post-compulsory education and employment which will not irreversibly determine their future; to devise new kinds of adult education opportunities and raise priorities for it; and to ensure the expansion of vocational training. Another report in 1980 by a panel of experts to the Minister of Local Government and Labour entitled "Employment and Working Conditions in the 1980s: Perspectives on the significance of the technological and economic development for employment and working conditions" examines the debate about information technology in the context of working conditions and employment. A future scenario, called the "distribution strategy", gives employment and its qualitative improvement priority among economic goals. It emphasises employment developments, notably the use of an important share of oil revenues to finance a continued rapid expansion of the public sector, while at the same time supporting enterprises threatened with closure. This situation requires a great deal of training and retraining, especially for those underemployed groups such as unemployed adults, untrained young people and women. A long-term strategy envisaged measures to expand the capacity of educational courses, to develop rapidly public sector employment opportunities and to give increased retraining for mobility. Training and retraining subsidies will have to be provided together with selective measures designed to break down the barriers between segments of the labour market and to increase the demand from disadvantaged groups. An interesting development in Norway is that the Ministry of Labour finances an expansion of upper secondary education beyond that financed by the Ministry of Education. For some years this has led to some 2,000 extra places being made available annually.

69. In Portugal the creation of a policy and a system for vocational education and training is being approached in a pragmatic, experimental way. In 1976 the existing technical secondary schools were abolished in order to use the facilities for a comprehensive upper secondary system. A new draft law proposes two systems of education from the tenth to the twelfth year of school: one system to prepare for access to university-level education, and another leading to working life and to higher technical education. With a view to founding a national system of initial skill training, a pilot project was begun in 1980: a 3-year training scheme was organised by the Ministries of Education and Sciences and of Labour in co-operation with large enterprises, notably military workshops, the national steel industry, and the naval dockyard SETENAVE. It gives initial skill training for various trades (e.g. sheet-metal, welding, electrical) to facilitate access to working life, particularly for

1. Education and Working Life, OECD, Paris, 1977.

14 and 15 year-olds who have completed compulsory school. There is a common first-year curriculum, during which evidence of a capacity to learn specific skills is sought for further development in subsequent years. Although participating firms are under no obligation to employ the trainees on completion of the courses, placement and guidance are given priority by the Ministry of Labour. To establish liaison between the Ministries of Education and Labour and to guarantee the co-ordination of their various activities, a Permanent System to co-ordinate Education and Work (SAPETE), composed of officials of the two Ministries, has been set up by ministerial decision. It aims to develop and make the maximum co-ordinated use of the existing human and other resources of the Ministries of Education and Labour in the framework of vocational education and training and of information and counselling services. Under the Ministry of Labour the employment and training services have been reorganised by the creation in December 1979 of an Institute of Employment and Training (IEFP) which aims to meet the needs of decentralisation to the major regions; the creation of institutions for joint consultation; the improvement of management methods and financial and administrative responsibilities. Finally, to take into account the development of training by other Ministries (Agriculture and Fisheries, Trade and Tourism, Social Affairs and Justice) an interdepartmental commission was set up in November 1980 under the aegis of the Ministry of Labour and composed of representatives of each Ministry and of the regional governments of the Azores and Madeira, with the task of ensuring, among other things, the co-ordination of all their training activities.

70. In Sweden there have been several recent developments.

i) In the comprehensive upper secondary school where vocational education is integrated in schools designed for the whole age cohort, the responsibility for the age group 16 to 18 has recently been transferred from the labour to the educational authorities. Local authorities thus have the responsibility for all measures concerning this age group. The goal that has been expressed is that everyone should have access to some kind of training within the labour market.

ii) A new initiative was taken in December 1982 whereby the trade unions and the central employers' organisation agreed to create so-called youth places for young people aged 16 to 17. Central negotiations are followed by branch and local agreements in different firms, and also in municipal and State administration which will include agreements about how many places can be made available in each firm or agency. The wages are well below the market rates and amount only to 85 Swedish Crowns a day. The State subsidises the wages by 76 Crowns a day. During the first half of 1982 those places and subsidies have been administered by the labour market authorities, but it is probable that in the future they will be administered by the school authorities. The youth places will then make up a part of the means that are at the disposal of the schools

for the so-called youth guarantee. In April 1982 Parliament decided that the government ought to work out and propose a youth guarantee not only for the 16 to 18 year-olds, but for all young people up to 21 years of age.

iii) The Commission on the Upper Secondary school presented proposals in 1981 which are now being discussed. They include the suggestion that about two-thirds of the curriculum in the first year should be totally integrated for all students in different lines of study regardless of their subsequent choice of general or vocational studies. This first year should consist of practical work within the vocational part of the school and should include students aiming to go on to university. The government will probably present a bill to Parliament during 1983.

iv) A new Commission on the Economics of Education was created in June 1981 to examine how education and research can improve the future competitive power and growth potential of the Swedish economy. It aims to present ideas, suggestions and proposals to forge better ties between educational efforts as a change-inducing or "renewal" factor, on the premise that all vocational education and training make an important contribution to economic growth and employment. Efforts to improve the effectiveness of this interaction must relate not only to the formal education system but also to the further education and in-service training of the labour force, partly for the benefit of those who need new knowledge in their particular field of work, and partly for the benefit of those who need to be retrained for duties in other parts of the labour market. The analysis is expected to focus on how the educational system can be better related to changing labour market needs by appropriate curricula and adjustment of educational content and planning systems. It should also shed light on a more active and offensive role for the educational system to help build up a body of industrial know-how and competence, and to make the business world more apt to change and foster industrial expansion. The investigations will also seek to identify areas in which industrial growth is jeopardised because suitably trained manpower is in short supply. They will also seek to identify the changes in the educational and training levels of the labour force that will be necessitated by the restructuring that is anticipated in many business enterprises. Thus, a major thrust of the inquiry will be to ascertain whether education can be given a more active role in the economy.

71. In Switzerland skill training is governed by a law of 1978 which replaced earlier laws of 1963 and 1930. These legislative changes indicate a steady improvement in the basic system of apprenticeship which has never been questioned. The new law of 1978 envisaged several innovations which have not yet all been put in place. It provides for improvements in the training of teachers and instructors, widens the scope of training and enables

new kinds of vocational schools to be opened. The training regulations and curricula are revised with ever increasing frequency. This system, because of the flexibility of its well-established structure and its decentralised planning and operation, has so far helped avoid the unemployment of young people leaving compulsory school.

72. In the United Kingdom a consultative document "A New Training Initiative" was published in May 1981 by the Manpower Services Commission with full support from the government. This set out three major and inter-related objectives.

i) to develop skill training, including apprenticeship, in such a way as to enable young people entering at different ages and with different educational attainments to acquire agreed standards of skill appropriate to the jobs available and to provide them with a basis for progression through further learning;

ii) to move towards a position where all young people under the age of 18 have the opportunity either of continuing in full-time education or of entering training or a period of planned work experience combining work-related training and education; and

iii) to open up widespread opportunities for adults, whether employed, unemployed or returning to work, to acquire, increase or update their skills and knowledge during the course of their working lives.

The response to this document showed widespread agreement on these three objectives and in December 1981 the government published a White Paper "A New Training Initiative: A Programme for Action" setting out its plans for implementing the New Training Initiative. These include a new Youth Training Scheme which, from September 1983, will guarantee all 16 year old unemployed school leavers a year's foundation training, further development of training programmes for young people in employment, the setting of a target date of 1983 for recognised standards for all the main craft, technical and professional skills to replace fixed term and age restricted apprenticeships and the provision of training opportunities for adults including the development of an Open Tech Programme to make technical training more accessible. The White Paper also discusses the institutional arrangements needed at national and local level and the funding of training. The Manpower Services Commission published concurrently with the White Paper a document called "A New Training Initiative: Agenda for Action". This proposed that the new youth training schemes should cover young people in work as well as unemployed young people. The MSC has set up a high level working party including representatives of employers, trade unions and educational interests to examine the feasibility of such a comprehensive scheme, and this working party will report in the spring of 1982.

73. In the United States, where it is well recognised that an increase in human resources is essential to the economic and social development and security of the country, the bulk of the opportunities and some 90 per cent of the finance are provided by the states. The role of the federal government in vocational education and training is being reconsidered in the context of a wide debate about the role of government in the economy and in the lives of people. There is an opportunity to do so because much of the present legislation will expire in the near future. It has been suggested by the National Commission for Employment Policy(1) that its main aims should be to promote economic growth by increasing the productive capacity and flexibility of the labour force; to facilitate adjustment to labour market shocks (e.g. due to increased defence spending, increased oil prices or trade dislocations), probably through case by case interventions; and to secure equal opportunity for low-skilled, low-income individuals who may be the least likely to be able to afford training or know how to get it, the least employable, the most difficult to serve and still subject to discrimination. The Commission suggests that the federal role should be limited to promoting activities that would otherwise be neglected and those which are more efficient or less costly when undertaken at the federal level. The main focus of federally financed training should be to help people obtain and retain regular jobs and support themselves and their dependants. This, it is claimed, is preferable to income transfer payments.

---

1. National Commission for Employment Policy, 7th Annual Report, October 1981.

CHAPTER III

STRENGTHENING THE ECONOMIC ROLE OF VOCATIONAL EDUCATION AND TRAINING IN THE NEXT DECADES

74. Although it is widely recognised that vocational education and training are essential and help create part of the infrastructure of OECD economies, some countries are asking whether and how vocational education and training might make a more effective contribution to economic development and performance. Four essential roles can be considered, i.e. the contributions it can bring to innovation, to technology, to the supply of labour and to productivity and development.

Innovation

75. The process of innovation is complex and not well understood, but it seems clear that it contributes to and also depends on the creation of enterprises, the organisation of work and the skills of their personnel. The growth of the number of enterprises is one condition of expanding employment opportunities, whilst their dynamism and efficiency depend significantly on the people who manage and operate them. The momentum of innovation will depend on efforts to ensure that education at all levels helps people learn how to act as well as acquire knowledge for its own sake; on the availability of a labour force with high levels of technical and managerial skills; and on opportunities for the training of the personnel of all levels for new firms. In order to help increase investment there is a special role for governments to provide training to help the owners of new firms to set up and stay in business.

76. Many of the jobs that have disappeared in recent years have been in large industries and firms. Conversely, many new jobs have been created in small firms. In Australia most employees work in small firms of not more than 50 people; and a recent survey of the largest firms revealed a trend in them towards a division into establishments of less than 300 workers, mainly for reasons of industrial relations. In Germany 38 per cent of the labour force work in firms with not more than 50 employees, 60 per cent of the trainees are in these small firms, and 90 per cent of

the big increase in apprenticeships in the first year after the 1976 law was in small firms and in the tertiary sector. Later the big firms followed this example. In the United States two-thirds of the new jobs created in the last five years were in small firms with at most 50 employees, especially in high technology, and some of them have been a base for creating job opportunities for women and ethnic minorities. High technology makes it possible to establish small enterprises in rural areas. There is also scattered evidence from most countries of young people preferring to work in small firms which they think operate on a more humane scale.

77. The growth of employment in small firms has important implications for vocational education and training. It must be recognised that in some countries the owners of small firms are often unaware of the need for training, feel unable to devote finance and time to it, or have problems in replacing their personnel while they are engaged in it. Yet the creation of new enterprises in new sectors, using new methods of production or marketing is a part of the continuing process of industrial readaptation. For this reason there is in some countries an interest in providing training for new entrepreneurs and managers to complement financial and technical assistance. It is often said that training in entrepreneurship is difficult, although the BIAC has suggested that good vocational education and training are often a good preparation for starting an enterprise. In practice, training for entrepreneurs is mainly in business management for those who have moved from management or technology into self-employment. This is a field of high interest in the United States where efforts are being made to blend vocational education and training with business skills in order to foster entrepreneurship or self-employment in the hope that graduates will eventually employ others. The methods are primarily problem-solving, case studies, and simulating the setting up of a small business. There are also a number of experiments in progress, e.g. in Ohio and Oklahoma to bring together a vocational education and training college, university departments of technology and business, and financial facilities in order to set up industrial parks. In Finland there are courses in commercial institutes for entrepreneurs. In France some graduates from the "grandes écoles" are beginning to go into small firms, but they remain relatively few. Those who start new firms come mainly from the ranks of skilled workers, technicians and supervisors. Training is being made available as part of the policy for social development. Also in France unemployed people who take their unemployment benefits in a capital sum to start a new enterprise are given special training to do so. In Sweden a new bill in 1982 proposes training for small firms. In Switzerland under the new law of 1978 training is being extended to a higher level which includes the ability to manage a small or medium enterprise. In the United Kingdom there are some courses designed for people aiming to start their own businesses. The successes are important growth points, but relatively few in number. In Portugal the Institute for Assistance to Small and Medium-sized firms introduced special training courses in 1979 to help technological advance, managerial improvements and the absorption of unemployed

senior technical personnel into small and medium-sized firms. By 1980, 61 per cent of the participants had been taken into the firms that trained them and 18 per cent into other firms.

78. Innovation in large-scale industries and enterprises can generate training within some of them that is closely related to their new processes. However in large-scale operations there is often a high degree of division of labour into jobs that are precisely specified. For many years training for them entailed learning to work to narrow technical specifications and prescribed quality, often with a sustained effort. But in small and new enterprises work cannot be prescribed technically: each person is likely to have a number of functions which have to be co-ordinated informally with others, and which change as products and services develop, or as the firm develops. This calls for higher levels of vocational education and training in personal and social skills as well as technical ones and puts a premium on individual creativity, initiative and responsibility. Vocational education and training at all levels have yet to adapt to changes in the nature of work such as these. More inter-enterprise training schools and workshops will probably be needed.

79. There is an expectation of a continuously growing demand in most sectors, especially services, for people with a combination of more or less specialised technical knowledge, reasoning abilities and a certain amount of management skills. Such people must clearly have better and different qualifications compared to those of even highly skilled workers. In some countries there may be a trend towards middle-level skilled people replacing university graduates, especially in countries and enterprises where the technical content of decisions is becoming more important. Training for middle-level skills is being developed in innovative ways, including the creation of new types of institutions which are trying to integrate theoretical and practical learning, introduce new pedagogical approaches and construct close links with local economic development.

80. In this context the training of master craftsmen in Germany is of special importance. They have to pass a state-supervised examination demonstrating that they have the technical, legal, pedagogical and business management knowledge needed to manage an independent craft firm. There is a big demand by enterprises for people with a craft or industry master's qualification, i.e. 3 years' apprenticeship, at least 4 years' practical employment experience, followed by 1 1/2 years' further training in day or evening classes leading to a certificate from a Chamber of Commerce. In the last five years some 200,000 craft and industry masters have been trained. Many employers prefer these masters of craft or industry, who are becoming a new kind of middle management, to the technicians trained in institutions. In Switzerland since 1978 the number of occupations with master craftsmen has been increased. In Austria new curricula were introduced in 1979 to train skilled workers to become foremen and be qualified to train apprentices. In the United States community colleges and technical industitutes are greatly expanding training courses for technicians and those seeking middle-level

qualifications. In the last few years enrolments have shifted from about 60 per cent general education and 40 per cent vocational education and training content to more than 60 per cent vocational education and training.

New technologies

81. The future economic performance and development of most if not all OECD countries will be greatly dependent on their ability to utilise high technology. In some countries economic and industrial development policies are predicated on a deliberate choice of high technology, e.g. France, Germany, Ireland and Japan, and in others this strategy has been recommended, e.g. in Australia.

82. Technology has been changing through the centuries, but has now entered a distinct phase in the development of new technologies based on micro-electronics, biochemistry and energy production and conservation. Technologies based on micro-electronics are especially significant because miniaturisation and the reduced costs of production of computer "hardware" are allowing them to be used widely. Their application depends primarily on developing the "software", i.e. the programmes and procedures for solving problems, which because they require the abilities to think and take decisions are crucially dependent on the availability of people with high levels of skill and ability.

83. There is continuing debate and uncertainty about whether the widening use of new technologies will lead to net increases or decreases in employment, or about how they will occur among the different branches of industry and regions. For vocational education and training it is not particularly relevant that the continuing debate about whether technological progress is, overall, labour-saving or employment-creating, is inconclusive. Both sides of the process create requirements for vocational education and training i.e. to prepare those who will work in the new jobs and also to help those who will be displaced. There is also no clear evidence about whether technology is altering the balance between the numbers of high-skilled and low-skilled jobs, although it seems to be extending the range of jobs according to skills. More important, OECD economies need labour forces capable of utilising the potential of technology to increase production, develop new kinds of services and improve the quality of life at work.

84. The commitment made by several countries to high technology and the possibility of developing it in others require a transformation of vocational education and training at all levels, and it is essential for OECD countries to co-operate in considering in some detail what precisely this entails.

85. All children in school need to begin to understand the technological culture in which they will live and work, and it is

important to consider how this understanding can be started during basic education.

86. At the stage of vocational education and training in schools some countries have begun to introduce changes in the curriculum. Some of these innovations are intended to make students aware of the existence of specific technologies or certain types of equipment. Some of them may have both a practical and a pedagogical value. To take a simple example, students need to acquire keyboard skills if they are to discover for themselves how to operate the many different kinds of keyboards they will meet in real life e.g. on telephones, ticket machines, etc. Other innovations go much further. In Belgium, a course in computers and programming is being introduced in general and technical schools, and an option in miniature computers in the technical schools. In France compulsory courses in manual and technical subjects have been introduced in the colleges for students from 11 to 15 and the government is considering ways of introducing instruction about computers into all secondary schools. In Greece elementary technology has been introduced as a new subject of study: starting in the 7th year, students learn the principles of technical drawing, become familiar with tools, develop an understanding of safety, and learn how to plan projects. The curricula in the 8th and 9th year are still being designed. In the United Kingdom the Department of Education and Science has introduced micro-processing awareness programmes and the Manpower Services Commission, in conjunction with the Department of Industry is introducing Information Technology Centres which are designed to give unemployed young people training and work experience in micro-electronics and computing. They are located in inner city areas with high unemployment. In order to develop a realistic working environment the centres develop, produce and sell new technology goods. By the end of 1982, it is planned to have 100 ITeCs. These innovations are, of course, in addition to the courses given in technical colleges in most countries.

87. However, these innovations mainly concern skills that can be learned fairly easily and quickly. A more satisfactory approach to a basic understanding of technology has yet to be devised. Creating a sound theoretical basis is more important than instruction in ephemeral techniques. Academic subjects appear to be organised according to traditional disciplines corresponding to those of higher education in which deductive reasoning has pride of place. Teaching about technology has so far often been organised in school workshops around manual skills related to a narrow stratum of types of work. There appears to be a need to develop both the functional relevance of traditional disciplines and also the conceptual bases of apparently utilitarian subjects, and to go beyond that into a basic transformation of the curriculum. The aim should be to give students an understanding of the scientific and human foundations of technological cultures and the ability to deal with abstractions, to reason rigorously and to understand and create complex systems.

88. At the level of skill training it is far from clear how best to allocate specific training in technology between initial and further training. Vocational education and training institutions are often criticised for not providing initial skill training for new or emerging occupations and for continuing to give it for traditional occupations. In practice, however, the use of new technologies entails primarily a reorganisation of existing training or its adaptation to new conditions. Relatively few new occupations associated with new technology have emerged. The new ones are mainly associated with the construction and application of computer systems. The universe of occupational titles is very little changed by new technology because they are maintained as the basis of many collective agreements about pay, working conditions, etc. The content of some occupations may nevertheless be profoundly transformed. In Australia, Canada and the United States, for example, there is no new job title associated with the development of solar energy which has been absorbed into existing occupations. This is no doubt true of most other OECD countries.

89. In practice, although the content of jobs is often rapidly changed by technology, the pattern of this change is not uniform or predictable. It is governed by such factors as the age structure of firms in a branch of industry, costs or collective bargaining. Thus, the introduction of training in the specific aspects of the latest technologies has to be timed with care. It is probably an error to introduce training in specific technologies during initial training unless they are already used in most firms, e.g. photoprinting methods, which have now replaced lino-typing in most firms. In Germany, for example, the Federal Training Institute designs regulations for training on the basis of functional aims and minimum standards for an occupation. An individual firm can add more specific content if it uses a specific technology and the technology is only put into the minimum regulations when it becomes general. These considerations reinforce the already widely recognised arguments for broad-based initial skill training.

90. The location of more specific training about technology is primarily in further training after an initial qualification. At this stage students are also better prepared to cope with advanced theory. The nature of the work done by many people with middle-level skills may be undergoing a transformation. It is in the nature of technology, which is the application of science to production, that it develops continuously. There is thus a need for people who are able to learn continuously about developments in theory and practice and adapt them to the operations of their firm. Formal training can to some extent help in this process, but it is primarily one which is performed at work. In contrast to the traditional notion of learning on the job from others it is a process of self-learning. To meet these needs there is a growth of short-cycle (mainly one- or two-year) technical and technological institutions which give training above or beyond the level normally attained in initial training but different from traditional university education. In some countries initial and further training may be overlapping. In Australia, where

apprenticeship training normally lasts four years, in some firms trainees who can complete the training in less time spend the balance of their apprenticeship in further training.

91. Among technological innovations the computerised treatment of information is the most profound cause of changes in the content and organisation of work. It can be a means of co-ordinating different parts of productive activity to a high pitch of efficiency, but in doing so it can shift the locus of decision-making from the Board to technical managers. It can change relationships between a firm and its suppliers and customers. Consequently, there is a need to train heads of enterprises, technologists and managers to understand how computer logic works, to control it and to take account of the consequences, i.e. it is primarily a matter of management training. Yet this aspect is neglected at present. In most countries training in how to operate new equipment is provided by the producer and does not include the managerial assessment of the consequences. Few countries yet include, in the training of computer specialists, consideration of the consequences for the firm. Consideration might be given to encouraging or requiring enterprises introducing new technologies to prepare an assessment of their possible effects on employment levels and on the content and organisation of jobs. This concept is not far removed from the practices of some countries such as Australia and New Zealand of including a chapter on the possible impacts on employment in statements about the likely impact of industrial and regional development projects on the environment.

92. Whilst many initiatives are being taken by governments, institutions and enterprises to modify and extend training in relation to technology, and whilst many individuals are seeking to extend and deepen their knowledge through specialised courses and self-instruction, it may be asked whether OECD countries are developing vocational education and training policies and systems in a sufficiently rigorous way, not merely to adapt to observed innovations in technology, but to create the conditions under which technology, especially high technology, can be developed, efficiently utilised and properly managed and controlled in the interests of both economic and social development.

Manpower supply and scarcities

93. Vocational education and training provide people with the skills that they will use in the future. Starting from this simple fact it is often argued that such provision should extend to the people who will be employed in the future, often some years ahead. It is further argued that the labour force should be provided with a pattern of occupational skills which corresponds to the pattern of jobs that will exist in the future. This argument occurs repeatedly in public discussion. Yet it is well recognised that reliable employment forecasts are difficult to make even in the short term, let alone in the medium term; many policy-makers consider that such forecasts are misleading and out

of place in a free labour market. It is inevitable that there will either be a greater supply of trained people than jobs available, i.e. unemployment, or a smaller relative supply, i.e. scarcity. The chances of the two coinciding at the overall national level are slight, and even less for each branch of industry. If there are differences between the supply and the demand for labour they are corrected by the labour market, e.g. by changes in wages or working conditions. It would not be correct for vocational education and training to be given the blame for the unemployment or scarcities that occur or to be expected to assume the responsibility for avoiding them in the future.

94. In practice, the notion of imbalances in the labour market is deeply rooted. In the currently depressed labour market situation it is often argued that it is not worth training people when it is uncertain how they will be employed or whether they will even obtain jobs. In many countries employers hesitate to train. Moreover, for many people access to training is directly linked to having a job, so people who lose their attachment to an enterprise are deprived of training facilities. In this situation it is far from clear to what extent the public authorities should intervene, whether to provide additional training in public institutions or to maintain the training activities of firms by subsidising them or purchasing places from them for the unemployed. Very little is in fact known about how precisely training capacity in each country has been affected by the worsening of the economic and labour market situation. It seems that some capacity has very likely been lost, and that there is a need to reconstruct it. It also seems that some capacity has been adapted to a different clientèle. For example in some countries the departments of firms that used to give skill training for their internal labour markets have managed to remain in existence by taking in trainees from the external labour market under public programmes to give work experience to young people.

95. The notion of imbalances persists in the continuing complaints about skill shortages or manpower scarcities even in times of high unemployment. There is no doubt that there are still some unfilled job vacancies in Member countries. In Canada a special survey in 1980 identified very many specific vacancies, especially in the West where industrial growth is rapid, in major development projects and around them. In Finland a regular series of vacancy surveys indicates that shortages became progressively less important from 1973 to 1979, and then worsened as the general economic situation improved. In Germany a series of regular surveys indicates that they became steadily easier during the 1970s in manufacturing and construction. In Ireland the change in 1976 to a new high-growth economic and industrial strategy rapidly absorbed surpluses of skilled manpower, and by 1980 scarcities could be observed in occupations concerned with technology and industrial construction. In Japan surveys of skilled vacancies reveal continuing though gradually decreasing vacancies in mechanical and electronic engineering occupations.

96. There is clear evidence that some vacancies are persisting and it seems likely that the effective demand in areas of rapid

industrial growth and in a few occupations associated with new information technologies will remain hard to satisfy for some time. Nevertheless, it also seems clear that reports of shortages are often exaggerated. Vacancies appear to be ex post observations of disequilibria between the demand for manpower and the supply under current conditions of wages, working conditions, prospects, etc., but the reality is more difficult to observe. In fact one vacancy may be filled by someone leaving a vacancy behind him at the beginning of a chain of job changes which multiplies the apparent number of vacant jobs. It must of course be recognised that a single vacancy may be critical to the operation of an enterprise.

97. The notion of shortages is vague. It may reflect unsatisfied social needs which have not, however, been made explicit in the labour market by job offers, e.g. such as value judgements that there are not enough people doing cancer research. In some countries the employment services have been unable to find the vacant jobs corresponding to reports of shortages. Employers and unions have different views about what constitutes a shortage: the actual labour inputs that are negotiated are usually different from a technical minimum. If there are plenty of people available on the labour market, employers' job specifications tend to rise: they increasingly call for characteristics such as years of experience which are not acquired through training.

98. Yet despite its vague character, the notion of shortages is a strong lever in developing vocational education and training. When employers think they have or will have a shortage their response is often a stream of measures to attract people: wages, pensions, working conditions, and improved training. If firms think that training is crucial to ensuring a supply of labour they tend to become disenchanted with public training policies whenever scarcities of any kind arise. In practice, shortages are often met by a reorganisation of production. Two studies in Germany in 1978 and 1979 showed that employers reacted to shortages first by reorganising production and only secondly by training within their enterprises(1). Extra training is often given to people who already have some as opposed to creating new initial training places.

99. An alternative to basing policies on shortages and on marginal adjustments to the supply of labour is to take a more comprehensive view of education and the labour market. Both sides have been profoundly changed by developments during the past decade or two. The education and training levels of the labour force have risen: people are capable of a better performance than employers often demand. The nature of work is being transformed by technology and changes in the organisation of work. New forms

---

1. IFO and INFRATEST

of economic development depend on manpower policies, including vocational education and training which balance the two, and a dialogue at the national level and also in enterprises.

100. It seems useful to distinguish two aspects of the supply of labour in devising policies for the future. It may be a mistake to focus attention on the numbers of people who may be needed in the future and more realistic to put the emphasis on generally raising levels of training. There is widespread evidence that the availability of skilled manpower induces employers to engage in production. The problems of people with high levels of training are less severe than those of people with little or none. It is difficult to compensate for a lack of vocational education and training at school or of initial skill training.

Productivity and development

101. OECD countries need to be able continuously to improve their ability to compete in the international economy. They need also to be able to respond to the final demands of individuals and of society as a whole if economic development is to continue and raise the quality of life, despite constraints on the rate of growth of GNP.

i) The national level

102. Perhaps the greatest potential contribution to overall factor productivity and to development is to be realised at the national level by helping support the restructuring of OECD economies through a shift of manpower to branches of industry, regions and firms where growth is highest. This process is clearly one that is mainly dependent on policies other than vocational education and training, which have a supporting role. The main problem is to know how best this supporting role can be carried out.

103. Some countries aim to facilitate a redistribution of manpower through the management of training programmes, but in practice many problems arise in attempting to do so. Experience suggests that it is neither feasible nor desirable to try to be ahead of changes in the structure of employment by forecasting how it will develop in different industries or enterprises, and to calculate the training implications. Reports of scarcities and forecasts are unreliable guides. Surveys of vacancies give some indication of current needs but not of future needs, and few countries make them. It is difficult to persuade employers or workers to adopt a contra-cyclical attitude and to increase training when unemployment is high. The credibility of public training policies is reduced when people cannot find jobs immediately at the end of their training, even though this is for lack of effective demand. Nevertheless, in France there is agreement to develop a policy of vocational education and training despite unemployment and the uncertainties which it creates for the entry of young people into working life.

104. Some countries attempt to adjust levels and patterns of training in a discretionary way to accompany trends that have begun to appear in employment. In Australia where centralised wage fixing is more concerned with controlling inflation than dealing with occupational needs, training is dependent on decisions by the TAFE. Some flexibility in the system as a whole can be achieved as long as new institutions are being built. However, experience in Australia, Canada and Ireland indicates that there are obstacles to changing the balance of courses within institutions: teaching staff may have security of tenure and short-term contracts raise costs. Flexibility depends upon public authorities being able to mobilise new kinds of training within the system. In Germany the Federal Employment Office provides funds for retraining courses on the basis of information from local employment offices about the proportion of participants in previous courses who obtained jobs. In the United States there is also a discretionary allocation of funds, following analyses of the placement of programmes to expand participants intended to help indicate which programmes to expand or discard. Retraining programmes for the unemployed or those who want to change their jobs obviously contribute to restructuring, but there are many reservations about the attempts to measure the results according to the increased wages of the participants.

105. In Austria and Germany the allowances paid to trainees vary, under collective agreements, among industries and regions, and are raised to induce young people to enter training where levels are thought to be low: for example, in Germany, they are in the first year much higher in mining (DM1,000 a month) than in tailoring (DM200 a month). In Germany and Sweden the financial conditions and content of training (e.g. in construction) have been changed to make it more attractive. At the same time, it should be noted that some countries, allowances are not differentiated: they are considered to be an aid to students and not a means of steering them among occupations.

106. There might be some scope for co-ordinated planning of future production, fixed capital and manpower if the change of approach mentioned above (para 32) could be realised. In some countries where firms are required to file an environmental impact statement before undertaking a new capital project it might be possible to extend the notion of the environment to include the effects on employment and training.

107. A more fundamental approach that is emerging in several countries is to help the labour market work more smoothly and individuals to become more mobile among industries, occupations and firms. The trend towards a more polyvalent organisation of curricula composed of modules is happening at the level of institutions in many countries, especially in Canada and the United States where there is a steady rise in the average age of students and in part-time studies. It is a free response by institutions to the demands expressed by adults. Modular curricula can reduce the human and social costs of training by reducing failure rates and are particularly useful in enabling individuals to make marginal changes quickly to their skills, and

so adapt them to changes in work. The wider use of modular curricula might be encouraged through collective agreements about the content and organisation of training curricula, the definition of occupations and the formal qualifications required, promotion and wages. Modular curricula need to be designed with care to avoid the fragmentation of knowledge. OECD countries could benefit from an exchange of experience with the design and use of modular curricula.

108. In Germany there is a high degree of interoccupational mobility which appears to rest on a recognition by employers and unions of the value of training in helping people develop basic skills that are transferable among different kinds of work. For example, an apprenticeship in banking is seen to be useful as a preparation for a career in a variety of different industries because it develops the skills of dealing with people and gathering information fast. There are however obstacles to mobility: in some countries the definition of occupational boundaries may be strengthening and extending to new middle-level professional groups which are introducing their own certification systems.

ii) The enterprise level

109. At the level of enterprises little is known about the effect of vocational education and training on the overall factor productivity of a firm. Personal and social skills are obviously of considerable importance to the coherence and general morale of the personnel, which underlines the need to develop these qualities in schools. This is most important in the introduction of new technologies. A firm can bring in a new technology and specialised staff, leaving the existing personnel aside or laying some of them off. Alternatively, it can introduce the technology as part of a collective agreement which includes retraining the existing personnel. The overall performance of a firm may also depend on avoiding the bottlenecks that may arise for lack of training of some critically important workers.

iii) The individual level

110. The quality of vocational education and training is a major factor in the performance of individuals in their jobs. The marginal contribution of an individual to output cannot be measured because of the impossibility of isolating it from other factors of production. It is also impossible to know to what extent vocational education and training are intrinsically valuable in providing skills essential to the performance of a job compared with the use by the labour market of formal credentials for selection. Vocational education and training are, however, not to be equated with credentials. It is a process by which people learn to work and continuously acquire knowledge and skills which are adapted to their employment. The BIAC has stressed that, because of reductions in hours of work and in working lives, it is important both that time at work be used more efficiently and that workers with more leisure should have a good general education.

111. To some extent governments can influence quality through their arrangements for the design and inspection of vocational education and training and for testing the competency of participants. The wider spread of vocational education and training in schools could be encouraged through inspection and in the design of examinations. At the stage of initial skill training there is much debate about whether school-based or enterprise-based training is the better, and this is reflected in the existence of significantly different systems in Member countries. For example they are mainly school-based in Canada, Sweden and Yugoslavia; enterprise-based systems are found in Australia and the United Kingdom; there are parallel systems in some countries such as Austria, Denmark, France and Ireland; and dual systems of part-time training and part-time school in firms in Austria, Germany and Switzerland. Pedagogical methods tend to be better in school-based systems, although there are wide differences among countries. There is a strong preference among employers in many countries for employees who have learned about work in the workplace itself and are familiar with the disciplines of employment. These characteristics of employment cannot readily be simulated outside productive enterprises.

112. The quality of training depends heavily on teachers and instructors having a sound pedagogical training, an adequate level of expertise in their field and a knowledge of the world of work outside education. There is a need to organise teacher training in a way whereby universities and employers collaborate with vocational education and training institutions. Several countries consider that, if students are to be given satisfactory opportunity for work observation and practice in enterprises, teachers and instructors must also have relevant experience. Greece for example is considering in-service training for teachers in enterprises to make them fully aware of the problems that future graduates will have to face.

113. The quality of training also depends on individuals themselves, for their ability to learn varies greatly. It is important to allow able students to proceed quickly if they can. The reduced time of learning need not reduce the time devoted to training: in the remainder of the time at present devoted to training, individuals can increase their skills and proceed to advanced training. This is recognised practice in some firms and could be more widely adopted.

114. Finally, it is clear that the quality of training depends heavily on students being able to be in touch with up-to-date theory and modern equipment. Keeping abreast of theory is a further, demanding task for teachers. Practice is uneven when only a few teachers can take advantage of in-service training. The age of the buildings and equipment available varies greatly, not only among technical and vocational schools but among enterprises as well. In times of economic recession and financial constraint it thus becomes harder to keep training facilities fully up-to-date, yet one of the conditions of economic recovery

is that the labour force shall be sufficiently familiar with evolving techniques of production to be able to use and develop them.

115. Perhaps the most comprehensive and detailed set of arrangements for the design and inspection of programmes and the testing of trainees is to be found in Austria, Germany and Switzerland. The minimum standards for curricula used in firms are developed by the Federal Training Institute in Germany, and recognised by the Federal Ministry of Economic Affairs in agreement with the Federal Ministry of Education and Science. In Austria they are developed by the Ministry of Commerce and Industry, which approves the specific arrangements in firms before training can be undertaken. The curricula of the educational institutes attended by the trainees are designed by the Länder and complement the curricula used in the firm. Training is inspected regularly by the Chambers of Industry and Trade, although the ratio of inspectors to trainees in Germany has been criticised. There are well established arrangements for examining trainees in these countries.

116. In the United Kingdom Industrial Training Boards have attempted to improve the quality of training through their statutory powers of levy and levy exemption and through their advisory services. This combination of levy exemption and advice has been effective in securing a better quality of training but has made little advance in securing the fundamental reforms of training which are considered desirable.

117. In the United States, where the bulk of finance is provided by the states, a concern for quality is a major preoccupation. This is primarily the responsibility of the educational institutions supported by technical material from curriculum advisory and development centres. There is also competition among the colleges for students.

118. Generally, it seems that in many countries the quality of vocational education and training could be raised by better initial planning. If quality is to be judged by the effectiveness of providing individuals with adequate levels of competence, the design of vocational education and training has to take into account the needs of different groups. The aim of making it available to as many people in the labour force as possible entails adapting methods to those who have low levels of ability. In some countries students in vocational education and training institutions are of relatively lower socio-economic status and attainment and have relatively lower levels of ability. This poses a dilemma: either some institutions can raise their entry requirements which forces the problem back to the schools or they can devote relatively more time to remedial education which diverts time from occupational proficiency. Preliminary planning should also create styles of training which enable participants to observe the application of their training to a range of problems or tasks.

119. In France the means of training by apprenticeship and new modes of combined work and learning (alternance) are considered to be complementary, each responding to the specific needs of young people or of certain trades. The school system is opening to the world of work in enterprises, thanks to practical periods in enterprises as part of education. Apprenticeship and combined work and training include a phase of theoretical instruction in a given centre in which pedagogical methods are monitored in order to improve their effectiveness.

CHAPTER IV

NEW INITIATIVES TO RELATE VOCATIONAL EDUCATION AND TRAINING TO SPECIFIC GROUPS IN THE LABOUR FORCE

120. In most OECD countries some significant changes have been taking place in the composition of the labour force. The opportunities for entering or remaining in employment have presented different kinds of problems for four groups which are at present major preoccupations of governments: new entrants to the labour force; the children of foreign workers; women and girls; and adults who are unemployed or risk becoming unemployed. Several countries are in the process of changing their policies and programmes to meet the different needs of these groups.

New entrants to the labour force

121. It has been widely agreed that vocational education and training must become a part of general education for everyone, and that they must start during compulsory education. The improvement of preparation for working life for students in school is a long-term aim in several Member countries, and ways in which this is being done in Member countries have recently been examined by the OECD. However, among the many problems of young people there is an urgent concern in several countries to do something for the large numbers of young people who have already left school and gone into the labour force with inadequate preparation for working life. So far young people have had relatively less difficulty in making the transition from school to stable employment in countries which have extensive arrangements for initial training in enterprises, notably Austria, Germany and Switzerland.

122. In addition to efforts to create jobs directly and indirectly, and to provide initial skill training, several countries have in recent years introduced special work experience measures. Although some valuable lessons have been learnt, these measures have proved unsatisfactory in many ways, and there is wide agreement that they need to be replaced by better conceived policies in a longer-term perspective.

123. When work experience measures were first introduced, mainly about 1976, it was thought that the rise in the unemployment of new entrants to the labour force was due to three key factors: the "bulge" in the population of young people reaching working age, a conjunctural fall in activity and employment, and the weaker ability of young people to compete in the labour market. It seemed therefore that the problem would pass in time and that the most appropriate solution was to provide quickly a large number of opportunities which would keep young people out of the labour market while improving their eventual employability. Because the bulk of new entrants found jobs on their own, the work experience measures were aimed mainly at those who were hard to employ because of their lack of educational attainment, knowledge of the labour market or lack of awareness of their own interests and abilities. The opportunities mainly constituted an induction to the labour market. They were of short duration, most of them settling down after some pragmatic experimentation to periods ranging from three to six months, primarily in order to use the available resources for as many new entrants as possible.

124. A broad assessment of the impacts of work experience programmes alone suggests that on balance they can be unsatisfactory.

i) The main weakness, it is now widely agreed, is that the problem of the transition from school to work is no longer a demographic or a conjunctural one: it is a continuing phenomenon and part of a broader problem of how young people can find their place in society. The proportions of participants who have found employment at the end of work experience programmes have declined steadily and few participants have been able to go on to skill training. The measures have destabilised the labour market by delaying the entry of participants into the labour force and deferring their unemployment, multiplying their movements into and out of jobs, extending the secondary labour market, and may well have raised the rate of unemployment. The specific age limit of 18 under most measures has led to many participants being put on to the external labour market when they reach the upper limit, and being replaced by others. Many employers have used the measures as a source of cheap labour. In some countries many of the places have been in sectors unrelated to future job opportunities. Some young people have been attracted to the programmes from regular education by the relatively high allowances paid. Some of the new training institutions that have appeared in the market are using the measures to provide themselves with a clientèle. In some countries many of the instructors are untrained or unskilled. The measures have not reached young adults aged 18-25, nor have they extensively penetrated the stratum of the very low achievers who tend either not to apply for programmes or to be rejected. For example, in the United States there are many disadvantaged young people who do not enter the Job Corps Program; and some 40 per cent of those

who do drop out in less than three months(1). This raises the question of what to do about these groups. These weaknesses have led to much political criticism, especiallly when adults have been displaced.

ii) On the other hand some positive lessons have been learnt from work experience programmes. In some countries many opportunities have been created. In France, for example, the results have been important given the focus on a large age group (16-25) and the use of many kinds of measures ranging from direct hiring to training, adapted to the different categories of new entrants. Many young people have found that work can be a useful learning experience. Employers have been brought into contact with many kinds of young people they have not met before, with new habits of speech and dress, and have discovered that they can learn to work. This has altered the emphasis they place on formal educational credentials and opened up jobs to many young people who would not previously have had them. Teachers in the institutions that have given some of the courses have adapted their methods to a new clientèle which has no obligation to attend or to learn, and have responded to the wish of many young people to choose what they learn. It has, for example, entailed discussions and even negotiations to reconcile a participant's uninformed or ill-formed perceptions of what he or she wants to learn or become, with his or her capacities and the realities of the labour market. Teachers have become aware of the learning value of being in a work environment, of socialisation among participants and with adults, and of having to bear responsibilities. They and the participants have realised that the process of maturing can accelerate rapidly, especially among many young people who at school had been thought hopeless. These important pedagogical lessons have yet to be documented. There is much scope for international co-operation to examine these lessons and to draw the implications for curricula and methods in secondary education.

125. The balance of the advantages and disadvantages of work experience measures is hard to measure. An assessment should consider a wide range of capital and operating costs, including wages and subsidies, and consequences such as the displacement of other workers and benefits such as subsequent employment and productivity and access to subsequent skill training or higher education. In a few countries some limited quantitative assessments, which can be costly, have been made. It has been estimated that, in the Job Corps Program in the United States, which provides basic vocational education and training and work experience for severely disadvantaged young people, for 1977 benefits exceeded costs; that the net social benefit of the

---

1. Daniel H. Saks and Ralph E. Smith, Youth With Poor Job Prospects, Education and Urban Society, vol 14, no 1, November 1981.

programme was about $80 million; that in real terms the unit costs declined by about 34 per cent from 1970 to 1979; and that unit costs are very high for young people with the greatest employment difficulties. In the United Kingdom the average net cost of a place in the Youth Opportunities Programme was estimated to be around £23 a week in 1979/80 taking into account savings in unemployment benefits and additional tax revenues from the earnings of participants.

126. Some OECD countries are now discussing how to replace the existing measures with new ones. In this, two trends could become significant. One concerns the attempt to improve the skill content and quality of the opportunities for new entrants. In some countries the present aim of creating opportunities for one year may well prove to be the point of departure for the creation of more comprehensive, permanent and longer duration initial training. The other is the growing realisation that, important as vocational education and training may be, young people can only satisfactorily obtain a place in employment and in social life if they are supported by a wide range of other measures, such as assistance with health and housing.

127. In Ireland, the government has announced its decision to create a new Youth Employment Agency for young people aged 15 to 25 and to raise the proportion of young people in work experience programmes from 0.3 per cent of the labour force (which totals 1.1 million) to 1.5 per cent. Half the increase is to be financed by a levy of 1 per cent on wages and salaries.

128. In the United Kingdom the political commitment to a New Training Initiative has been announced. A comprehensive programme of vocational training combining good quality training and varied work experience in 12-month opportunities will be introduced by September 1983. In the meantime, current work experience for unemployed young people on the Youth Opportunities Programme will be improved markedly. Young people will increasingly have the opportunity to sample different types of experience, to undertake basic skills training and also training related to specific jobs. There will be more scope for advice and support, systematic assessment of trainees' progress, movement from one opportunity to another. In addition a longer stay in work experience and training becomes necessary. Many of these improvements are already being made and arise, in part, from what has been learnt about the weaknesses of work experience. In particular, work experience on employers' premises (WEEP) may be open to abuse from some sponsoring employers. For example, an employer might take on young people as trainees instead of as ordinary employees - surveys suggest this applies in about a quarter of WEEP placements. Alternatively, an employer might substitute trainees instead of engaging adult employees; evidence suggests that this occurs with 5 per cent of WEEP placements. That said, good WEEP schemes have been found to provide invaluable work experience. To be set against substitution figures, recent evidence suggests that about 4 permanent new jobs are provided for young people which would not otherwise be available for every 100 trainees going through WEEP schemes: about half of these were provided for

trainees because the employer did not want to lose a good worker. For the future, sponsors will have to meet increasingly stringent quality requirements and it will be extremely difficult for them to abuse schemes.

129. In Portugal a new approach for young people who have left school at 14 or 15 after compulsory education and entered the labour force is to provide them with a training contract for 3 years with an employer. During training they receive an allowance from the government. It is not an employment contract and at the end of the training the trainee is not obliged to remain nor does the employer have to keep him.

130. In Canada experiments with the Ontario Career Action Program have been encouraging. A graduate (or school leaver) of any educational programme who cannot after a period of six months find employment related to his/her skills, is brought together with an employer for a trial period of work at no cost to the employer. The individual receives about $100 per week as a living allowance from the province. About 80 per cent of the participants find employment or decide to return to school for more formal training. Since the experiment began about 4 years ago the training time with the employer has been reduced from 12 months to a maximum of 16 weeks. On average participants spend only 12 weeks before a decision can be made. Because of the progress of the programme, funds have been increased each year, with a 40 per cent increase in the current fiscal year.

Children of foreign workers(1)

131. The children of foreign workers, when numbers are rapidly increasing in some countries, have many educational and labour market handicaps. Many of them have completed only low levels of education in their countries of origin. Some of those who have been to school in the host country perform better at school than native-born children, yet fail to get jobs. More often, they leave with no qualifications. Thus these children are more likely to be unemployed or to secure jobs in decline or which have become precarious. The resolution of these practical problems raises fundamental questions about the extent to which migrants and their host countries will understand and modify their sometimes conflicting cultural practices. In addition to cultural and religious obstacles to performing well in school, or even attending school, and to work, inadequate knowledge of the language of the host country is a major handicap to seeking occupational guidance before leaving school, searching for a job, obtaining vocational education and training, and to obtaining a job. It is particularly urgent to give effective basic language training as a first step in creating new ways of organising and

---

1. This subject is being examined more fully by the Working Party on Migration.

providing vocational education and training to people who have different cultural views about the place of work in life.

132. In the five countries considered in a recent OECD study(1) (Belgium, France, Germany, Sweden and Switzerland) there are about 3.8 million young foreigners under the age of 25. Of those of working age the great majority are employed in manual work (including apprentices) ranging from 70 per cent in Sweden to almost 85 per cent in France and Germany. Although provisions allowing unrestricted access to employment have been enacted in various countries, children of migrant workers can often encounter discrimination in their efforts to obtain an apprenticeship or other training opportunities in the labour market and this is aggravated by the generally high unemployment levels among young people in many countries. Some restrictions are still placed on young migrants: those who do not fulfill the necessary conditions cannot be sure of being permitted to follow an occupation at the end of their schooling or training period.

133. Experience has shown that it is necessary in practice to differentiate training to meet the needs of different groups of children. For example in Germany there are three main categories.

i) Those born in Germany and sent to school in their parents' country of origin and who cannot speak German when they return to Germany. This applies to more than half the children of Greek and Turkish origin. These children are not used to learning all day in a classroom and so are being given a course which entails a practical activity for about two-thirds of the time. An increasing proportion of these courses is being given in firms.

ii) Those who have stayed in German schools but failed to obtain a leaving certificate. For them courses are given which are two-thirds German language and one-third work.

iii) Those who have obtained a certificate but, because they have personal problems, are accepted only as unskilled workers. They are put in mixed groups where other German young people look after them in an attempt to reduce the barriers towards immigrants.

Girls and women(2)

134. The strong and widespread movement in OECD countries towards parity of treatment for the sexes and to promote greater equality of opportunity for women is supported by a range of

---

1. "Young Foreigners and the World of Work", OECD cerestricted document, Paris, 1981.

2. This subject is being examined in detail by the Working Party on the Role of Women in the Economy.

public measures to facilitate their employment, including child-care facilities, maternity leave combined with job protection and the removal of prohibitions on the employment of women in factories at night. The movement also depends significantly on actions in the courts to remove discrimination. The origins of unequal employment for the sexes also lie in the different opportunities for education and training. Yet even when the proportion of girls studying difficult subjects is greater than boys, there are still more girls than boys in low-level jobs (as in Switzerland). Fewer women than men have continuous work histories, and so are unlikely to have had the same opportunities as men for either further training or for learning on the job. Employers are reluctant to provide training for women in part-time work. They may also hesitate to provide it for women returning to the labour force after raising a family if they think that their years of remaining working life are likely to be relatively short. On the other hand, new information-processing technologies, in making it possible to disperse work and learning in space and time, may open up new possibilities for women to undertake skill training for the same kinds of job opportunities as there are for men.

135. Some countries have introduced positive measures with the aim of trying to improve the balance between the sexes in vocational education and training opportunities. In New Zealand special courses have been provided for girls leaving school in radio and television maintenance and in basic engineering skills, together with special management courses to help women reach senior jobs in the education system.

136. At the level of schools, most countries aim to promote greater parity between the sexes. The main obstacles are that notions of sex discrimination are deeply rooted and not always perceived, and that textbooks which reflect out-dated ideas are only slowly being changed in content and stocks replaced.

137. In Canada annual targets have been established for the enrolment of women in skill courses for traditionally male-dominated occupations and the provinces are encouraged to make available pre-trades training programmes for women. For example, under the Canada Manpower Training Programmes in Ontario, Manitoba and Saskatchewan, 6-8 week courses are designed to give both classroom and practical exposure to introduce and orient women to non-traditional occupations as a preparation to enter regular trades training courses.

138. In Denmark, the government has increased aid to country boroughs to subsidise traineeships and apprenticeships in both the private and public sectors so as to promote the more equal distribution of training between the sexes.

139. In France, as in several other countries, women are the majority of job seekers (52 per cent) and girls represent 60 per cent of unemployed young people under 25. Moreover participation in training courses is low (29 per cent in 1980). Therefore, at the initiative of the Ministry of Women's Rights, the Ministry of

Training has asked the Regional Prefects "...to bear in mind priority of access to courses to be given to girls and women and should as far as possible be raised in each region to 60 per cent of the total number of trainees". This recommendation should encourage not only the opening of new training that is traditionally for men, but also provision of a wider range of courses and wider access to training, notably in new technologies. Since 1966 the Ministry of Education has opened to girls training courses traditionally thought of as for men, but girls still attend them only rarely because of social phenomena which put a brake on hiring women in industrial occupations. Thus measures are being studied in order to lift the barriers that remain to the access of women to training.

140. In Germany special training programmes were started in 1981 for girls in traditional male occupations, such as metal-working, by placing some 1000 girls in 200 firms. Other firms began to follow suit. The proportion of girls training in metal-working has risen from 2 per cent of the trainees in 1978 to 5 per cent in 1981, or around 27,000.

141. In Ireland, the AnCo has increased the number of women among the unemployed undergoing training and retraining from 10 per cent (813) in 1975 to 29 per cent (4,596) in 1981.

142. In Norway, special employment information measures have been introduced with the support of the labour market authority whereby women are briefed on local employment and education opportunities in meetings of 1-5 days duration, followed in some cases by unpaid practical work experience in enterprises.

143. In Sweden, the Köping Project of the Committee on Equality between Men and Women provides women workshop employees with practical and theoretical training in order to acquire more advanced duties within the enterprise. Also in Sweden, special 4-6 week courses on working life and training designed for inexperienced job seekers have been developed to provide intensified labour market information for women. Since 1979 County Labour Market Boards are empowered to give priority in training to applicants from the sex that is under-represented in the occupation for which the training is intended.

144. In the United Kingdom increased numbers of women in the Training Opportunities Scheme (TOPS) have undertaken training in skilled manual work and in management and higher-level courses. The Wider Opportunities for Women (WOW) courses, introduced in 1978 as pilot projects, have now been established to help women returning to work assess their capabilities and the employment opportunities available. There are also grants to employers to promote opportunities for women in non-traditional occupations, for example by the Engineering Industry Training Board, to encourage the recruitment and training of girls as technician trainees.

Adults faced with unemployment

145. During the mid-1970s, when OECD economies entered a period of slower economic growth, total employment continued to rise even though unemployment increased. The burden of the worsening of the labour market situation fell heavily on young people, partly for lack of new jobs to absorb new entrants, partly because many older workers were protected by law, collective bargaining and custom. The continued degradation of the labour market situation during the past two or three years has seen total employment falling in some countries and a fall in employment in a few sectors such as steel-making, shipbuilding, automobile production, textiles and clothing. This has led to increasing numbers of adults in mid-career and older workers being laid off. These lay-offs have been particularly marked in some regions with a narrow industrial base dominated by a few large plants, and many other workers are at risk of becoming unemployed. There is some evidence that older workers displaced by technology do not have opportunities to be retrained and upgraded and are replaced by younger people. OECD countries should be aware of the risk that the numbers of older workers faced with unemployment will continue to increase for some time to come.

146. The aim of policy should be to help retain older workers in the mainstream of social life through further skill training which preserves the value of their accumulated experience and helps them compete with other workers on a broadly equal basis. Yet, although OECD countries have developed flexible arrangements to provide further skill training and retraining for adults it seems that the number of opportunities is insufficient and that the available training is not always effective. It seems that there is little experience and few theoretical ideas to suggest what should be done. Apart from the lack of jobs there are three major problems that will have to be overcome:

i) First, the unemployed themselves have difficulties in facing the shock of unemployment and in deciding to look for another kind of work and to be retrained. Movement to another region is inhibited by the employment of other members of the family as well as a reluctance of older workers to move to a new home in another community. In some countries pension rights are not transferable. Some blue collar workers who have been employed in tracitional production jobs find it hard to take the formal training which is needed for the different kinds of jobs that are most likely to be available.

ii) Firms themselves are providing only limited retraining. It should be a matter of public concern that when firms go out of business it is not only productive capacity which is lost but capacity for training. Those remaining in business continue to be uncertain about future demand. In Japan there is a tradition of firms retaining workers who become redundant and retraining them for other kinds of work but at present this is found in rare instances in other OECD countries.

iii) The training capacity of the public institutions has been built up in relation to lower levels of unemployment in most of the post-war years and to a less strong need for a structural redeployment of the labour force. Pedagogical practices often remain unsuited to adults.

147. As a result of the decline in the number of entreprises and in employment-linked training, the main responsibility for training for the unemployed has in effect been transferred to the public authorities. The extension of services entails two main kinds of action, apart from finance, which is discussed in Part V.

i) First, there is a need to recognise the problem of adults and for appropriate political decisions to be taken. It may be asked whether, despite the gravity of the unemployment of young people, attention has not been diverted from the needs of other age groups. Overall policies for reducing unemployment in some countries, which envisage not flexible but early retirement, have therefore given little consideration to retraining. Uncertainties about where next jobs will be created may explain the lack of co-ordination between industrial and regional development policies and retraining.

ii) Second, the expansion of retraining for the unemployed requires an adequate number of people professionally skilled to counsel adults and to retrain them. There may be some limited scope for increasing the number of counsellors and for training older workers for this kind of work and for retraining some redundant school teachers for work with adults.

148. The solution does not however rest entirely with the public authorities. The experience of the past few years has demonstrated dramatically that the strains of economic recession and adjustment fall very heavily on the labour force. There has been much discussion of the possibility of maintaining employment by diversifying production and retraining those who become redundant by the growth of overall factor productivity. This could only be achieved at the national level by massive changes in attitudes, but it is already happening within a few firms.

CHAPTER V

THE REFORM OF MECHANISMS FOR FINANCING INITIAL AND FURTHER SKILL TRAINING

149. Many problems have arisen in the financing of initial and further skill training as a result of such factors as changes in the employment situation which reduces opportunities in firms; the unequal way in which training is shared among firms; changes in the balance between instruction in institutions and practice in firms; changes in the composition of the labour force and constraints on expenditure. Several countries are considering the possible reform of their financing arrangements.

150. In many countries financing arrangements have evolved piece-meal. They are complex and the way that the costs are finally shared among governments, individuals and firms is far from clear. Indeed, in most countries it seems it is not known.

151. The overall financing system is composed of several different kinds of arrangement which are combined in various ways in each country.

i) In some countries most individuals pay fees to public education and training institutions, as in Canada and the United States. They also pay fees in several countries where there is a private sector providing training. Students may be able to obtain loans or grants.

ii) In some countries the government bears all or a large part of the costs of training. Australia, Austria, Belgium, Finland and Ireland allocate funds to the institutions through a variety of channels. Allowances from public funding may be available for all students as in Norway; or as in Canada the federal government can pay for training for selected members of the labour force. In Ireland and New Zealand the government makes discretionary grants for specific types of training. Within a country, training expenditures may be shared among different levels of government, and their shares may vary from one programme to another.

iii) In several countries firms bear the cost of training in the first instance, e.g. Australia, Austria, Germany, the Netherlands and Switzerland but the final incidence of the costs is not clear in most countries.

iv) In some countries where training in firms is extensive there are levy-grant systems whereby all firms contribute to a fund from which grants are paid to those firms that actually give training. This is at present one of the financing mechanisms in the United Kindom. It is a minor source of financing in Ireland and the Netherlands. The formulae vary from one country to another.

v) In France the initial training of young people is financed by the State. Enterprises make a small contribution in the form of an apprenticeship tax at the rate of 0.6 per cent of the wage bill, which can be discharged either by paying for approved training or by paying it direct to the public treasury. Further training and social development are financed by the State and by a specific tax on enterprises: firms with more than 10 employees must spend on training a sum equal to a percentage of the wage bill (at present 1.1 per cent). In fact some firms spend more than the required minimum: in 1980 the average spent by employers was about 1.8 per cent and the government hopes that this will rise to 2 per cent. Those who spend nothing on training have to pay the corresponding amount to the public treasury. Whilst maintaining this important source of finance, ways are being studied to simplify the financing mechanisms in order to reduce waste and the accumulation of unutilised funds.

vi) In Germany employees and employers subscribe 4.0 per cent of the wage bill, in equal shares, to a fund from which either unemployment benefits or retraining for the unemployed can be financed. This is not a model that is widely used in other countries.

Key issues

152. Experience in the design of financing arrangements indicates that there are a few major issues which it has so far proved difficult if not impossible to resolve.

The share of costs among firms, and between the State and firms

153. The first consideration has been to try to ensure a supply of skilled manpower, when it is thought to be insufficient, by equalising costs among enterprises. In most countries, firms which train bear an undue proportion of the total costs of training when those they have trained move to jobs in firms that provide none. Thus some countries have introduced levies on firms that do not train, which are used to pay grants to firms which

do. In practice, whilst these levy-grant kinds of mechanism have helped spread the costs more equitably, they do not seem to have induced firms as a whole to raise the total amount of training. There is strong political opposition to these mechanisms and few seem likely to survive. This leaves a problem that is at present unsolved of how the costs of training can be shared among employers. The need to equalise costs among enterprises will become less serious as the innovations in methods discussed in this report become more widely used. They will transform the problem into one of how to share the cost between the State and firms.

154. In the United Kingdom the cost of training is shared by enterprises and the government. In 1964 Industrial Training Boards were established in certain sectors and authorised to raise a levy among member firms that was paid as a grant to those firms which offered training. In 1973 the provision for the payment of grants was withdrawn from almost all industries, and firms which offered adequate training were exempted from the levy. During the late 1970s public expenditure on training for certain groups, notably apprentices and adults, rose and the introduction of the Youth Opportunities Programme gave rise to a major increase in public spending. During the 1970s, therefore, the share of training funded by public expenditure greatly increased. The government considers that employers must accept responsibility for the supply of skilled labour which they require and that the Industrial Training Boards have not in practice shifted the cost of training fairly to those who use trained labour. It planned to replace sixteen of the twenty-three Boards by non-statutory arrangements in the sectors concerned and from 31 March 1982 the operating costs of the remaining Boards will be funded by the employers concerned. A fundamental problem is that public funding may substitute for private funding of training and that the allocation of resources thereby may not reflect real industrial needs. Moreover, when numbers in training are low for conjunctural reasons many governments experience pressures to increase their contribution, yet they cannot always afford to do so at the time and it would subsequently be difficult to reduce it.

155. Underlying the debate about the financing of training in enterprises is the issue of whether governments or enterprises should be responsible for training and, in particular, for the amount of training. In Germany the 1976 law gave the federal government power to bring a levy grant into operation when the number of training places was below a certain level; specifically, when it did not exceed the number of places demanded by at least 12 1/2 per cent. The law was introduced following a heavy fall in the number of places. The number of places rose but never reached the level envisaged. Nevertheless, there was a very large increase in the places created by employers and the levy-grant mechanism was never brought into use. The law was declared unconstitutional in 1980 and the idea of a levy grant has now been abandoned. It is argued that a levy is not necessary when 1.7 million young people are in training without one. In Ireland the government has decided to impose a levy of one per cent on wages and salaries, excepting the lowest rates, in order to finance

programmes for training, work experience, community service and wage subsidies. In Sweden, where basic initial vocational education is financed by the central and municipal governments, and on-the-job training is paid for by employers, training which falls into neither of those categories is financed by a payroll tax.

The costs of combined work and training

156. A second issue is that there is a movement in enterprise-based training towards more off-the-job training, especially full-time training in institutions in the first year, partly because better quality and longer basic theoretical instruction is needed. Conversely, institution-based training is being modified to provide periods of work practice in firms. In addition to countries with well-established systems of apprenticeships, several others are experimenting with new approaches. For example, in Greece combined training and work has recently been introduced in an experimental way. Thus, there is a tendency for enterprise-based training and institution-based training to converge towards an arrangement that has become known as "alternance" or "combined training and work". This does not however imply that costs will simply be shared on a new basis of governments paying for training in institutions and firms paying for the training they give. The extent to which the burden of training falls on a firm can be significantly changed by two factors. One is relief from company taxation. The second is the value of the output of the trainee. The two factors together can reduce the net cost of training to the employer to a very low level. Some firms claim that carefully managed training can yield a current profit and that this is a consideration in providing training in the first place and in maintaining levels. The share of the overall cost of a combined system of training and work also depends on whether governments can maintain their expenditures and firms their levels of employment. The willingness of employers to provide opportunities under combined training and work arrangements may be strongly influenced by the wages or allowances they pay. As a proportion of the wages of newly qualified craftsman, the allowances paid to apprentices are lower in Austria, Germany and Switzerland than in other countries. This has led to a great deal of interest in some of the other countries in the possibility of adjusting payments to trainees according to their levels of experience and training.

Are financing arrangements flexible enough?

157. A third major issue is whether existing financing arrangements are sufficiently flexible to respond to changes in work content due to new technology or changes in work organisation; to changes in employment, such as the growth of part-time work or the rising unemployment of adult workers; and to changes in the labour force, such as the increasing participation of women, changes in flows of migrants and permanent immigrants and the large numbers of new entrants. Expenditure on vocational education and training may be rising. In some countries this rise is faster than the growth of GNP and in others slower as a matter

of policy. However, the access of some groups to vocational education and training appears to depend crucially on governments being willing to provide the finance for them for reasons of social policy, and having adequate resources to allocate to them. The expansion of training in support of high technology may depend on deliberate decisions to change the allocation of funds, as for example in Canada where the Ontario government has decided to earmark for this purpose an increment in funds under the Training in Business and Industry Programme. The key questions that arise seem to be whether such changing needs can be accommodated under regular financing mechanisms or whether exceptional financing arrangements of a discretionary kind are not likely to become a permanent feature and whether the fragmented responsibilities for financial management in some countries cannot be better co-ordinated or consolidated in support of policy. Although systematic evidence is lacking, there are many reports of wide discrepancies in training costs which might persist partly for lack of sufficient overall financial control. The more flexible financing arrangements become and the more discretionary spending increases, the more important will it be to secure political consensus about expenditures. In Canada, Québec is thinking of setting up a special agency to manage spending on vocational education and training.

158. To help maintain levels of training in firms several countries introduced or extended training subsidies a few years ago, e.g. Australia, and France (in the framework of measures in favour of the employment of young people). At first they seemed to help maintain the numbers of people in training; but more recently uncertainty about future demand and production has made employers more reluctant to take up these subsidies and there are growing constraints on public spending. In the United Kingdom government support for first year apprentice training has been increased, and in 1981-82 one-third of all first year apprentices were being supported to some extent from public funds. The government has said that support will be maintained at this level in 1982-83.

159. An alternative way of maintaining enterprise training has been for governments to purchase training places for the unemployed. The argument for doing so is that if a worker loses his attachment to an employer, he also loses access to training, so that the government should assume the responsibility for him and for maintaining the training capacity of enterprises by purchasing places. Some countries, e.g. France and the United Kingdom, have in fact tried to use part of enterprise training capacity to provide work experience for new entrants, but this has meant changing the capacity to provide induction rather than skill training(1). A few countries have used this approach to provide skill training for unemployed adults. In the Netherlands the government pays firms up to 50 florins a day for each unemployed worker taken into training. In Norway courses of 3 weeks to 10 months in firms are financed by the manpower authorities for training in metal working, construction and commercial occupations, following negotiations with the employers'

organisation and the unions about the skills for which training is to be given.

160. In a few countries there have recently been some experiments in using unemployment funds to support training. In Canada the 1977 Unemployment Insurance Act allows trainees on approved courses who are entitled to unemployment benefits to go on drawing them. If necessary, the duration of their entitlements can be extended to the end of training plus up to six weeks to search for a job, subject to a maximum benefit period of 104 weeks. In 1980/81 some 99,000 trainees were helped in this way. This is a significant departure from the principle that someone who is in training and out of the measured labour force is unavailable for work and so not entitled to benefits. In Japan part of the employers' contribution to the unemployment fund, which is part of the special national budget, has been used for skill development since the amendment of the Employment Insurance Law in 1975. In Germany the fund which can be used to pay either unemployment benefit or training has recently been run down by payments of benefit, and when this happens the federal government has to make a special allocation to allow retraining to continue. Another problem is that although the fund is intended to be a kind of insurance there is a tendency for employees and employers alike to consider they have a right to make use of their contributions.

161. Training can be seen as an alternative to unemployment insurance in a wider perspective than the mere transfer of funds from unemployment insurance to spending on training. It can in the long term be a means of helping workers to adapt to changes in employment without becoming unemployed. The net costs to governments of training have been found to be low compared with outlays on unemployment benefits. It may also be significant that, in countries whose expenditures on training are fairly high, as in Germany and Sweden where they reach some 3 per cent of GNP, expenditures on unemployment benefits are low.

Many Member countries are considering changes in their vocational training systems to make a stronger contribution to economic development and performance and to help various groups in society to improve their qualifications.

(91 83 01 1) ISBN 92-64-12425-X F33/650

1. See para. 61 above.

OECD SALES AGENTS
DÉPOSITAIRES DES PUBLICATIONS DE L'OCDE

ARGENTINA – ARGENTINE
Carlos Hirsch S.R.L., Florida 165, 4° Piso (Galeria Guemes)
1333 BUENOS AIRES. Tel. 33.1787.2391 y 30.7122

AUSTRALIA – AUSTRALIE
Australia and New Zealand Book Company Pty. Ltd.,
10 Aquatic Drive, Frenchs Forest, N.S.W. 2086
P.O. Box 459, BROOKVALE, N.S.W. 2100

AUSTRIA – AUTRICHE
OECD Publications and Information Center
4 Simrockstrasse 5300 BONN. Tel. (0228) 21.60.45
Local Agent/Agent local
Gerold and Co., Graben 31, WIEN 1. Tel. 52.22.35

BELGIUM – BELGIQUE
CCLS – LCLS
19, rue Plantin, 1070 BRUXELLES. Tel. 02.521.04.73

BRAZIL – BRÉSIL
Mestre Jou S.A., Rua Guaipa 518,
Caixa Postal 24090, 05089 SAO PAULO 10. Tel. 261.1920
Rua Senador Dantas 19 s/205-6, RIO DE JANEIRO GB.
Tel. 232.07.32

CANADA
Renouf Publishing Company Limited,
2182 St. Catherine Street West,
MONTRÉAL, Que. H3H 1M7. Tel. (514)937.3519
OTTAWA, Ont. K1P 5A6, 61 Sparks Street

DENMARK – DANEMARK
Munksgaard Export and Subscription Service
35, Nørre Søgade
DK-1370 KØBENHAVN K. Tel. +45.1.12.85.70

FINLAND – FINLANDE
Akateeminen Kirjakauppa
Keskuskatu 1, 00100 HELSINKI 10. Tel. 65.11.22

FRANCE
Bureau des Publications de l'OCDE,
2 rue André-Pascal, 75775 PARIS CEDEX 16. Tel. (1) 524.81.67
Principal correspondant
13602 AIX-EN-PROVENCE : Librairie de l'Université.
Tel. 26.18.08

GERMANY – ALLEMAGNE
OECD Publications and Information Center
4 Simrockstrasse 5300 BONN. Tel. (0228) 21.60.45

GREECE – GRÈCE
Librairie Kauffmann, 28 rue du Stade,
ATHÈNES 132. Tel. 322.21.60

HONG-KONG
Government Information Services,
Publications/Sales Section, Baskerville House,
2/F., 22 Ice House Street

ICELAND – ISLANDE
Snaebjörn Jónsson and Co., h.f.,
Hafnarstraeti 4 and 9, P.O.B. 1131, REYKJAVIK.
Tel. 13133/14281/11936

INDIA – INDE
Oxford Book and Stationery Co.
NEW DELHI-1, Scindia House. Tel. 45896
CALCUTTA 700016, 17 Park Street. Tel. 240832

INDONESIA – INDONÉSIE
PDIN-LIPI, P.O. Box 3065/JKT., JAKARTA. Tel. 583467

IRELAND – IRLANDE
TDC Publishers – Library Suppliers
12 North Frederick Street, DUBLIN 1 Tel. 744835-749677

ITALY – ITALIE
Libreria Commissionaria Sansoni
Via Lamarmora 45, 50121 FIRENZE. Tel. 579751/584468
Via Bartolini 29, 20155 MILANO. Tel. 365083
Sub-depositari:
Ugo Tassi
Via A. Farnese 28, 00192 ROMA. Tel. 310590
Editrice e Libreria Herder,
Piazza Montecitorio 120, 00186 ROMA. Tel. 6794628
Costantino Ercolano, Via Generale Orsini 46, 80132 NAPOLI. Tel. 405210
Libreria Hoepli, Via Hoepli 5, 20121 MILANO. Tel. 865446
Libreria Scientifica, Dott. Lucio de Biasio "Aeiou"
Via Meravigli 16, 20123 MILANO. Tel. 807679
Libreria Zanichelli,
Piazza Galvani 1/A, 40124 Bologna. Tel. 237389
Libreria Lattes, Via Garibaldi 3, 10122 TORINO. Tel. 519274
La diffusione delle edizioni OCSE è inoltre assicurata dalle migliori librerie nelle città più importanti.

JAPAN – JAPON
OECD Publications and Information Center,
Landic Akasaka Bldg., 2-3-4 Akasaka,
Minato-ku, TOKYO 107. Tel. 586.2016

KOREA – CORÉE
Pan Korea Book Corporation,
P.O. Box n° 101 Kwangwhamun, SÉOUL. Tel. 72.7369

LEBANON – LIBAN
Documenta Scientifica/Redico,
Edison Building, Bliss Street, P.O. Box 5641, BEIRUT.
Tel. 354429 – 344425

MALAYSIA – MALAISIE
and/et **SINGAPORE – SINGAPOUR**
University of Malaya Co-operative Bookshop Ltd.
P.O. Box 1127, Jalan Pantai Baru
KUALA LUMPUR. Tel. 51425, 54058, 54361

THE NETHERLANDS – PAYS-BAS
Staatsuitgeverij
Verzendboekhandel Chr. Plantijnstraat 1
Postbus 20014
2500 EA S-GRAVENHAGE. Tel. nr. 070.789911
Voor bestellingen: Tel. 070.789208

NEW ZEALAND – NOUVELLE-ZÉLANDE
Publications Section,
Government Printing Office Bookshops
AUCKLAND: Retail Bookshop: 25 Rutland Street,
Mail Orders: 85 Beach Road, Private Bag C.P.O.
HAMILTON: Retail Ward Street,
Mail Orders, P.O. Box 857
WELLINGTON: Retail: Mulgrave Street (Head Office),
Cubacade World Trade Centre
Mail Orders: Private Bag
CHRISTCHURCH: Retail: 159 Hereford Street,
Mail Orders: Private Bag
DUNEDIN: Retail: Princes Street
Mail Order: P.O. Box 1104

NORWAY – NORVÈGE
J.G. TANUM A/S Karl Johansgate 43
P.O. Box 1177 Sentrum OSLO 1. Tel. (02) 80.12.60

PAKISTAN
Mirza Book Agency, 65 Shahrah Quaid-E-Azam, LAHORE 3.
Tel. 66839

PHILIPPINES
National Book Store, Inc.
Library Services Division, P.O. Box 1934, MANILA.
Tel. Nos. 49.43.06 to 09, 40.53.45, 49.45.12

PORTUGAL
Livraria Portugal, Rua do Carmo 70-74,
1117 LISBOA CODEX. Tel. 360582/3

SPAIN – ESPAGNE
Mundi-Prensa Libros, S.A.
Castelló 37, Apartado 1223, MADRID-1. Tel. 275.46.55
Libreria Bosch, Ronda Universidad 11, BARCELONA 7.
Tel. 317.53.08, 317.53.58

SWEDEN – SUÈDE
AB CE Fritzes Kungl Hovbokhandel,
Box 16 356, S 103 27 STH, Regeringsgatan 12,
DS STOCKHOLM. Tel. 08/23.89.00

SWITZERLAND – SUISSE
OECD Publications and Information Center
4 Simrockstrasse 5300 BONN. Tel. (0228) 21.60.45
Local Agents/Agents locaux
Librairie Payot, 6 rue Grenus, 1211 GENÈVE 11. Tel. 022.31.89.50

TAIWAN – FORMOSE
Good Faith Worldwide Int'l Co., Ltd.
9th floor, No. 118, Sec. 2
Chung Hsiao E. Road
TAIPEI. Tel. 391.7396/391.7397

THAILAND – THAILANDE
Suksit Siam Co., Ltd., 1715 Rama IV Rd,
Samyan, BANGKOK 5. Tel. 2511630

TURKEY – TURQUIE
Kultur Yayinlari Is-Turk Ltd. Sti.
Ataturk Bulvari No. 77/B
KIZILAY/ANKARA. Tel. 17 02 66
Dolmabahce Cad. No. 29
BESIKTAS/ISTANBUL. Tel. 60 71 88

UNITED KINGDOM – ROYAUME-UNI
H.M. Stationery Office, P.O.B. 569,
LONDON SE1 9NH. Tel. 01.928.6977, Ext. 410 or
49 High Holborn, LONDON WC1V 6 HB (personal callers)
Branches at: EDINBURGH, BIRMINGHAM, BRISTOL,
MANCHESTER, BELFAST

UNITED STATES OF AMERICA – ÉTATS-UNIS
OECD Publications and Information Center, Suite 1207,
1750 Pennsylvania Ave., N.W. WASHINGTON, D.C. 20006 – 4582
Tel. (202) 724.1857

VENEZUELA
Libreria del Este, Avda. F. Miranda 52, Edificio Galipan,
CARACAS 106. Tel. 32.23.01/33.26.04/31.58.38

YUGOSLAVIA – YOUGOSLAVIE
Jugoslovenska Knjiga, Terazije 27, P.O.B. 36, BEOGRAD.
Tel. 621.992

Les commandes provenant de pays où l'OCDE n'a pas encore désigné de dépositaire peuvent être adressées à :
OCDE, Bureau des Publications, 2, rue André-Pascal, 75775 PARIS CEDEX 16.

Orders and inquiries from countries where sales agents have not yet been appointed may be sent to:
OECD, Publications Office, 2 rue André-Pascal, 75775 PARIS CEDEX 16.

66145-2-1983

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16 - No. 42511 1983
PRINTED IN FRANCE
(91 83 01 1) ISBN 92-64-12425-X